Philip Morris International - Climate Change 2022

C0. Introduction

C0.1

(C0.1) Give a general description and introduction to your organization.

Philip Morris International Inc. (PMI) is a leading international tobacco company working to deliver a smoke-free future and evolving its portfolio for the long-term to include products outside of the tobacco and nicotine sector. PMI has its executive headquarters in New York, U.S., its primary listing on the New York Stock Exchange (NYSE: PM), and its Operations Center in Lausanne, Switzerland. The company's current product portfolio primarily consists of cigarettes and smoke-free products, including heat-not-burn, vapor, and oral nicotine products, which are sold in markets outside the U.S. In 2021, PMI adjusted net revenues amounted to approximately USD 31.7 billion, of which 29.1% related to the sale of smoke-free products.

PMI's ambition to become a company with a net positive impact on society starts with researching, developing, and commercializing less harmful alternatives to cigarettes for those adults who otherwise would continue to smoke, ultimately allowing us to phase out cigarettes and become a fully smoke-free business. As a next step, we are expanding our offerings to include products that fill critical unmet needs in the wellness and healthcare space. To achieve our purpose, a radical transformation of our business is required. Sustainability stands at the core of our corporate strategy and helps address some of the challenges resulting from the transition, minimizing negative externalities associated with our products, operations, and value chain, while spurring innovation and better positioning the company for success over the long haul.

Our approach to sustainability focuses on developing strategies that can successfully address the environmental, social, and governance topics identified as a priority by our sustainability materiality assessment. From an environmental standpoint, we focus on reducing post-consumer waste from our products, tackling climate change, and preserving nature.

Engagement beyond our own operations—in particular in our supply chain—is key, as this is where a significant portion of our sustainability impacts occurs. We are working with business partners to proactively identify, manage, and reduce risks, and create shared value.

Our business has a significant, global supply chain organized in two main streams: direct spend focused on materials used in the manufacture of our finished products (e.g., tobacco leaf, packaging materials, electronic devices and accessories) and indirect spend focused on goods and services necessary to operate our business.

The description above is a summary and is qualified in its entirety by reference to the full text of PMI's Annual Report on Form 10-K for the year ended 2021, 2022 Proxy Statement dated March 24, 2022 filed with the U.S. Securities and Exchange Commission on the same date, and the full text of PMI's Integrated Report 2021. Certain terms, definitions and explanatory notes, as well as reconciliations of the applicable non-GAAP financial measures, are set forth in the materials referenced above.

In this submission:

-"PMI," "we," "us," and "our" refer to Philip Morris International Inc. and its subsidiaries;

-Trademarks and service marks in this submission are the registered property of, or licensed by, the subsidiaries of PMI and are italicized;

-Aspirational targets and goals set forth in this submission do not constitute financial projections, and achievement of future results is subject to risks, uncertainties, and inaccurate assumptions, as outlined in our forward-looking and cautionary statements on page 252 of PMI Integrated Report 2021;

-Materiality: In this submission and in related communications, the terms "materiality," "material" and similar terms, when used in the context of economic, environmental, and social topics, are defined in the referenced sustainability standards, and are not meant to correspond to the concept of materiality under the U.S. securities laws and/or disclosures required by the US Securities and Exchange Commission.

-Unless otherwise indicated, the scope of the data in this submission covers our operations worldwide for the full calendar year 2021 or reflects the status as of December 31, 2021. Where not specified, data come from PMI financials, non-financials, or estimates. Unless explicitly stated, the data and information in this submission do not incorporate wellness and healthcare acquisitions made by PMI during 2021 of Fertin Pharma A/S, Vectura Group plc., and OtiTopic, Inc., which together represented 0.3 percent of PMI's total reported net revenues in 2021.

C0.2

(C0.2) State the start and end date of the year for which you are reporting data.

	Start date	End date	Indicate if you are providing emissions data for past reporting years	Select the number of past reporting years you will be providing emissions data for
Reporting year	January 1 2021	December 31 2021	No	<Not Applicable>

C0.3

(C0.3) Select the countries/areas in which you operate.

Albania
Algeria
Argentina
Armenia
Aruba
Australia

Austria
Bangladesh
Belgium
Bosnia & Herzegovina
Brazil
Bulgaria
Canada
Chile
China
China, Macao Special Administrative Region
Colombia
Costa Rica
Croatia
Curaçao
Czechia
Denmark
Dominican Republic
Ecuador
Egypt
El Salvador
Finland
France
Georgia
Germany
Greece
Guatemala
Hong Kong SAR, China
Hungary
India
Indonesia
Israel
Italy
Jamaica
Japan
Jordan
Kazakhstan
Kuwait
Lebanon
Lithuania
Malawi
Malaysia
Mexico
Morocco
Mozambique
Netherlands
New Zealand
Nicaragua
Nigeria
North Macedonia
Norway
Pakistan
Panama
Paraguay
Peru
Philippines
Poland
Portugal
Republic of Korea
Republic of Moldova
Réunion
Romania
Russian Federation
Senegal
Serbia
Singapore
Slovakia
Slovenia
South Africa
Spain
Sri Lanka
Sweden
Switzerland
Taiwan, China
Thailand
Tunisia
Turkey
Ukraine
United Arab Emirates
United Kingdom of Great Britain and Northern Ireland
United States of America
Uruguay

Venezuela (Bolivarian Republic of)
Viet Nam

C0.4

(C0.4) Select the currency used for all financial information disclosed throughout your response.
USD

C0.5

(C0.5) Select the option that describes the reporting boundary for which climate-related impacts on your business are being reported. Note that this option should align with your chosen approach for consolidating your GHG inventory.
Operational control

C-AC0.6/C-FB0.6/C-PF0.6

(C-AC0.6/C-FB0.6/C-PF0.6) Are emissions from agricultural/forestry, processing/manufacturing, distribution activities or emissions from the consumption of your products – whether in your direct operations or in other parts of your value chain – relevant to your current CDP climate change disclosure?

	Relevance
Agriculture/Forestry	Elsewhere in the value chain only [Agriculture/Forestry/processing/manufacturing/Distribution only]
Processing/Manufacturing	Both direct operations and elsewhere in the value chain [Processing/manufacturing/Distribution only]
Distribution	Both direct operations and elsewhere in the value chain [Processing/manufacturing/Distribution only]
Consumption	Yes [Consumption only]

C-AC0.6b/C-FB0.6b/C-PF0.6b

(C-AC0.6b/C-FB0.6b/C-PF0.6b) Why are emissions from agricultural/forestry activities undertaken on your own land not relevant to your current CDP climate change disclosure?

Row 1

Primary reason
Do not own/manage land

Please explain
We don't own the tobacco farms or the land that supply us with tobacco leaf, but the farmers who run them are a crucial part of our economic, environmental, and social footprint. We are working directly with them and our suppliers to promote sustainable farming and climate change mitigation initiatives as part of our Good Agricultural Practices (GAP) program.

C-AC0.7/C-FB0.7/C-PF0.7

(C-AC0.7/C-FB0.7/C-PF0.7) Which agricultural commodity(ies) that your organization produces and/or sources are the most significant to your business by revenue? Select up to five.

Agricultural commodity
Tobacco

% of revenue dependent on this agricultural commodity
More than 80%

Produced or sourced
Sourced

Please explain
The vast majority of consumables manufactured and commercialized by PMI (including cigarettes and smoke-free product consumables such as heated tobacco units) require tobacco

Agricultural commodity
Timber

% of revenue dependent on this agricultural commodity
More than 80%

Produced or sourced
Sourced

Please explain
100% of PMI heated tobacco units, cigarettes and other nicotine-containing products require timber derivative products. Additionally, PMI uses board and paper for packaging of the majority of PMI's products.

C0.8

(C0.8) Does your organization have an ISIN code or another unique identifier (e.g., Ticker, CUSIP, etc.)?

Indicate whether you are able to provide a unique identifier for your organization	Provide your unique identifier
Yes, an ISIN code	7181721090

C1. Governance

C1.1

(C1.1) Is there board-level oversight of climate-related issues within your organization?

Yes

C1.1a

(C1.1a) Identify the position(s) (do not include any names) of the individual(s) on the board with responsibility for climate-related issues.

Position of individual(s)	Please explain
Board-level committee	PMI's Board of Directors (BoD) and its Committees, incl. the Nominating and Corporate Governance Committee (NCGC) and Audit Committee of the BoD, are responsible to foster the long-term success of the company, including setting broad corporate policies, strategic direction, and overseeing management (which is responsible for daily operations). The BoD considers that environmental, social and governance (ESG) factors, including climate change, are relevant to the company's business and long-term success. As part of their responsibilities, the BoD revises and approves PMI's annual budget based on the company's performance and targets. This includes those resources required to deploy carbon emission reduction initiatives to achieve our climate action targets. Since 2018, the BoD mandated the NCGC of the Board, composed of 5 BoD members at the time of the 2022 Proxy Statement filing, to oversee PMI's sustainability strategies and performance, including to provide recommendations to executive management on climate change-related issues, and on a set of initiatives aiming at actively reduce potential negative impacts of our business on the environment. The NCGC and full Board of Directors are each updated at least once per year by the Chief Sustainability Officer on sustainability-related matters, including progress in priority areas and an overview of key initiatives (covering climate change and other environmental matters). In 2021, among other items, PMI's BoD reviewed the results of PMI's sustainability materiality assessment. As part of this revision, it was decided to update PMI's climate targets by developing long-term science-based targets, and to establish PMI's Sustainability Index (which includes KPIs related to carbon emission reductions and zero deforestation) and use this Index as one of PMI's performance metrics in the three-year incentive executive compensation program. PMI's Integrated Report 2021—that constitutes the main external communication of PMI on sustainability performance, including climate change—was completed with the oversight from PMI's Board of Directors and extensively reviewed by its Executive Chairman.
Board-level committee	The Audit Committee of the Board, composed by 6 Board of Director member at the time of the publication of the 2022 Proxy Statement, reviews with management, the internal auditors and the independent auditors, any sustainability-related information to be included in PMI's financial reporting framework. The Committee reviews and oversees PMI's policies and practices with respect to risk assessment and risk management, which covers those related to climate change. These can be natural disasters, water scarcity and agricultural instability, which may lead to increased pressure on natural resources and conflict with other users, affect our direct operations and/or our supply chain, and thus potentially impacting PMI's ability to operate. Such risks could disrupt our supply chain and could increase costs of our materials and operations.

C1.1b

(C1.1b) Provide further details on the board's oversight of climate-related issues.

Frequency with which climate-related issues are a scheduled agenda item	Governance mechanisms into which climate-related issues are integrated	Scope of board-level oversight	Please explain
Scheduled – some meetings	Reviewing and guiding strategy Reviewing and guiding major plans of action Reviewing and guiding risk management policies Reviewing and guiding annual budgets Reviewing and guiding business plans Setting performance objectives Monitoring implementation and performance of objectives Overseeing major capital expenditures, acquisitions and divestitures Monitoring and overseeing progress against goals and targets for addressing climate-related issues	<Not Applicable>	The Board of Directors (BoD) oversees PMI's full range of activities incl. establishing broad corporate policies, setting strategic direction and overseeing management. The BoD is responsible for the day-to-day operations of the company and considers climate-related issues as part of their oversight process. Part of the BoD's oversight is focused on management's efforts to enhance shareholder value responsibly and sustainably. Environmental, social and governance factors (ESG) are part of the responsibility of the BoD, and considered in the evaluation of the annual performances of the company and its management. The BoD approves the company's annual budget and receives updates on the company's performance and targets against the budget throughout the year incl. those related to the achievement of sustainability and climate change. The BoD has established various standing Committees to assist with the performance of its responsibilities and is regularly informed on future plans, and significant issues affecting the business, incl. climate-related ones. The BoD meets typically 6 times per year with additional meetings held as necessary. The BoD is advised on climate change-related issues by the Nominating and Corporate Governance Committee of the BoD, which oversees the Company's sustainability strategies and performance. The committee met 5 times in 2021. The BoD oversees management of risks relating to the Company's business. Risk oversight is conducted both by Committees of the BoD as well as by the full BoD. Management has identified and prioritized a number of key enterprise risks and, as part of the risk management process, has established a Corporate Risk Governance Committee ("CRGC") that comprises senior executive officers. The Audit Committee (AC) of the BoD receives updates related to the company's risk management and internal controls practices at least once per quarter. The company's risk management and internal control practices are designed to address all significant and/or emerging strategic, external, inherent process, and project deployment risks that could undermine our ability to achieve strategic business objectives and create value. ESG-related risks and opportunities are considered within our enterprise risk management practices. Key risk areas are identified and prioritized, and ownership is assigned for each prioritized key risk area to a member of the Company Management, reporting regularly to the appropriate BoD committees and to the entire Board of Directors throughout the year. The AC of the BoD was assigned to oversee the management of climate change prioritized risk as it could result in natural disasters, water scarcity, agricultural instability, which may impact PMI's ability to operate; the Committee met 10 times in 2021. A member of the Company Management, the Senior Vice President Operations, was tasked with the responsibility to address the climate change risk, including physical climate and water related risks.

C1.1d

(C1.1d) Does your organization have at least one board member with competence on climate-related issues?

	Board member(s) have competence on climate-related issues	Criteria used to assess competence of board member(s) on climate-related issues	Primary reason for no board-level competence on climate-related issues	Explain why your organization does not have at least one board member with competence on climate-related issues and any plans to address board-level competence in the future
Row 1	Yes	PMI assesses competence of the Board on sustainability related issues, including climate change-related issues, based on its members' relevant professional experience, academic background or other professional trainings on climate science, environmental science or engineering, sustainability, or other related subjects. Several members of PMI's BoD have expertise in sustainability and ESG matters, including climate change. Particularly, one of our Board Directors brings unique understanding of ESG strategy, as he has served as CEO to the Global Adaptation Institute (a foundation dedicated to the understanding of climate change) and as Co-Chair to the World Economic Forum's Global Agenda Council on Climate Change.	<Not Applicable>	<Not Applicable>

C1.2

(C1.2) Provide the highest management-level position(s) or committee(s) with responsibility for climate-related issues.

Name of the position(s) and/or committee(s)	Reporting line	Responsibility	Coverage of responsibility	Frequency of reporting to the board on climate-related issues
Other C-Suite Officer, please specify (Senior Vice President, Operations)	<Not Applicable>	Both assessing and managing climate-related risks and opportunities	<Not Applicable>	Quarterly
Chief Financial Officer (CFO)	<Not Applicable>	Other, please specify (Overseeing PMI's sustainability work)	<Not Applicable>	Annually
Other, please specify (Sustainability Committee)	<Not Applicable>	Other, please specify (Overseeing PMI's sustainability work)	<Not Applicable>	Annually
Chief Sustainability Officer (CSO)	<Not Applicable>	Other, please specify (Leading the integration of sustainability, including environmental topics, across PMI.)	<Not Applicable>	Annually

C1.2a

(C1.2a) Describe where in the organizational structure this/these position(s) and/or committees lie, what their associated responsibilities are, and how climate-related issues are monitored (do not include the names of individuals).

A member of the Company Management (CM), the Senior Vice President Operations (SVP Operations) has been tasked with responsibility to address climate change risks and opportunities across the company's activities, including physical climate, and transition risks. SVP Operations is delegated with operational responsibility, including maintaining robust business resiliency, risk assessment processes, and strategies to support business continuity. Our SVP Operations is responsible to ensure that climate change risks and opportunities are assessed, managed, monitored, integrated into long-range plan and budget review process, and reported to the appropriate Committee and the full Board throughout the year. Reporting directly to the CEO as of mid-2021, PMI's SVP Operations is strategically positioned within the company's structure to be able to effectively engage the Board and specific departments on climate issues. For this reason, he was assigned with responsibility to address climate change risks that could impact PMI's ability to operate such as natural disasters, water scarcity, change in weather patterns and agricultural instability, which are considered during the annual Integrated Risk Assessment (IRA) process.

SVP Operations holds the responsibility that climate-related issues are integrated into normal business activities; this forms part of our annual Long-Range Planning process which reviews and sets business direction, objectives and performance appraisal process. In 2021, the strategy was developed/reviewed based on prior year performance, sustainability commitments and objectives, regulatory/external developments, risk/opportunity assessments, stakeholder interest and business changes, through functional management teams up to our CM.

CM provided the Board with insights on the reassessment process throughout 2021. SVP Operations leads the Operations Sustainability function reporting directly to him, which drives environmental strategies and their full integration into the business, due to the strategic importance of climate-related issues within our operations. He receives updates on progress towards objectives and their achievement, in monthly meetings with the Operations Management Team reporting to him, and during quarterly functional reviews of the Operations Sustainability function.

Fully integrating ESG drivers into business strategy can significantly enhance both sustainability agendas and financial performance. Accordingly, PMI's Chief Sustainability Officer reports to the Chief Financial Officer—a member of the CM who heads the Sustainability, Finance, and Strategy functions.

The Sustainability Committee – composed of the company's CEO, CFO, Senior VP Operations, and other members of the CM – meets quarterly to review and validate PMI strategy, commitments, goals, progress, and annual reporting.

PMI's sustainability strategy is shaped by a formal sustainability materiality assessment, which was updated in 2021, re-prioritizing the most relevant sustainability topics for PMI. To help manage these topics from a global and sustainability perspective, within our CM, members are responsible for driving progress and delivering on our sustainability targets within their respective functions (e.g., mitigate climate change decarbonizing our value chain to SVP Operations).

PMI's CSO leads the strategy of integration of the most relevant sustainability topics, as prioritized based on PMI sustainability materiality assessment and including climate-related issues, across our business. PMI's CSO heads and manages PMI's Sustainability Team, reports on progress to the Sustainability Committee on a quarterly basis and updates the Board of Directors and the NCGC at least once a year.

From an operational perspective, our Operations Sustainability function and Sustainability Team coordinate the company's climate change-related activities. Most of the coordination takes place in the context of sustainability working groups and with local market coordinators. This helps ensure that our global strategies and programs are monitored, assessed and implemented down to the market level and that local realities are reflected in our global efforts.

C1.3

(C1.3) Do you provide incentives for the management of climate-related issues, including the attainment of targets?

	Provide incentives for the management of climate-related issues	Comment
Row 1	Yes	Our executive compensation program reflects our commitment to put sustainability, including the management of climate-related issues, at the core of our corporate strategy. The three components of total direct compensation for our executive officers are base salary, annual performance-based incentive compensation awards, and long-term variable equity awards. Sustainability performance (including progress on tackling climate change) is incorporated in both annual incentive awards and equity awards.

C1.3a

(C1.3a) Provide further details on the incentives provided for the management of climate-related issues (do not include the names of individuals).

Entitled to incentive	Type of incentive	Activity incentivized	Comment
Chief Executive Officer (CEO)	Monetary reward	Emissions reduction target	PMI's Board of Directors decided to better reflect PMI's commitment to sustainability, which is the core of its corporate strategy, by including the Sustainability Index as one of our performance metrics under equity awards. We use Performance Share Units (PSUs) as the three-year incentive in our executive compensation program, which is intended to motivate our executives to produce results that enhance sustainable shareholder value and strengthen the company over the long term. For a full list of individuals comprising the corporate executive team, please refer to Item 10 of the Annual Report on Form 10-K for the year ended December 31, 2021. As set out in PMI's Proxy Statement 2022, for the 2022-2024 PSUs, the Board introduced PMI's Sustainability Index as one of the three performance metrics. The Sustainability Index, weighted 30%, consists of two drivers: Product Sustainability (PS), defined as an aggregation of key performance indicators pertaining to social and environmental impacts generated by the company's products (measuring progress on its efforts to maximize the benefits of smoke-free products, purposefully phase out cigarettes, seek net positive impact in wellness and healthcare, and reduce post-consumer waste); and Operational Sustainability (OS), defined as an aggregation of key performance indicators pertaining to social and environmental impacts generated by the company's business activities (measuring progress on its efforts to tackle climate change, preserve nature, improve the quality of life of people in its supply chain, and foster an empowered and inclusive workplace). Amongst the OS, PMI's carbon emission reduction targets, both in Scopes 1 and 2, and Scope 3, make part of the key performance indicators.

Entitled to incentive	Type of incentive	Activity incentivized	Comment
Corporate executive team	Monetary reward	Emissions reduction target	PMI's Board of Directors decided to better reflect PMI's commitment to sustainability, which is the core of its corporate strategy, by including the Sustainability Index as one of our performance metrics under equity awards. We use Performance Share Units (PSUs) as the three-year incentive in our executive compensation program, which is intended to motivate our executives to produce results that enhance sustainable shareholder value and strengthen the company over the long term. For a full list of individuals comprising the corporate executive team, please refer to Item 10 of the Annual Report on Form 10-K for the year ended December 31, 2021. As set out in PMI's Proxy Statement 2022, for the 2022-2024 PSUs, the Board introduced PMI's Sustainability Index (SI) as one of the three performance metrics. The SI, weighted 30%, consists of two drivers: Product Sustainability (PS), defined as an aggregation of key performance indicators pertaining to social and environmental impacts generated by the company's products (measuring progress on its efforts to maximize the benefits of smoke-free products, purposefully phase out cigarettes, seek net positive impact in wellness and healthcare, and reduce post-consumer waste); and Operational Sustainability (OS), defined as an aggregation of key performance indicators pertaining to social and environmental impacts generated by the company's business activities (measuring progress on its efforts to tackle climate change, preserve nature, improve the quality of life of people in its supply chain, and foster an empowered and inclusive workplace). Amongst the OS, PMI's carbon emission reduction targets, both in Scopes 1 and 2, and Scope 3, make part of the key performance indicators.
Management group	Monetary reward	Emissions reduction target	PMI's compensation and benefits program supports business and financial objectives, including the achievement of sustainability efforts. At PMI, the Board of Directors (BoD) approves the company's annual budget and receives updates on the company's performance and targets against the budget throughout the year. The BoD considers that environmental, social and governance (ESG) factors, including climate change as relevant to the company's business and long-term success. These factors are part of the responsibility of the Board and are considered in its evaluation of the annual performance of the company and its management. Accordingly, these results are included in our overall performance rating which determines the cash bonuses for the management group and other eligible employees. Management group covering sustainability, including EHS topics are specifically appraised each year for performance against targets, including those relating to climate change e.g. emissions reduction target. The assessment of EHS results (which includes annual performance against our carbon footprint reduction targets) directly influences the annual performance rating of Management group including for example the Chief Procurement Officer (CPO) and its business unit managers. This covers the annual cash incentive compensation elements for those roles. For example, specifically to CPO, sustainability including climate-related issues is one of the top five objectives the variable compensation of our CPO is determined upon.
Chief Sustainability Officer (CSO)	Monetary reward	Behavior change related indicator	Our CSO, is responsible for driving Sustainability, including climate-related issues, across the organization: all functions and markets. This covers behavioral change towards sustainability, including those relating to climate change, within the company. The Company's commitment to having sustainability at the core of its corporate strategy is part of our CSO mandate, which include to improve PMI's ESG performance. CSO is incentivized against a set of predefined objectives, which include the company's performance against PMI's Sustainability Index that also cover environmental-related matters (incl. climate-related issues).
Buyers/purchasers	Non-monetary reward	Environmental criteria included in purchases	Tobacco leaf volume allocation depends, among other factors, on the performance of leaf suppliers that includes Good Agricultural Practices (GAP) program implementation as well as achievement of strategic initiatives targets such as carbon footprint reduction. If leaf suppliers in a region or a market perform well, the buyer responsible for this region/market will not be limited by GAP underperformance in his purchase options, and this would not influence the achievement of his annual objectives and therefore his performance evaluation.
Energy manager	Monetary reward	Energy reduction target	Managers and team members have energy efficiency and carbon footprint reduction targets set out in their annual performance objectives and are assessed against those targets in their annual performance appraisal. Energy efficiency and CO2 emissions reduction targets are set annually for at least three years for all our manufacturing facilities.
Environment/Sustainability manager	Monetary reward	Energy reduction target	Managers and team members have energy efficiency and carbon footprint reduction targets set out in their annual performance objectives and are assessed against those targets in their annual performance appraisal. Energy efficiency and CO2 emissions reduction targets are set annually for at least three years for all our manufacturing facilities.
Procurement manager	Monetary reward	Supply chain engagement	Procurement managers have energy carbon footprint engagement targets set out in their annual performance objectives and are assessed against those targets in their annual performance appraisal.
All employees	Monetary reward	Other (please specify) (Climate change mitigation projects)	Specific company awards such as the CEO Award and Recognition for Excellence Awards, which are either cash or stock, are available for Energy Managers, EHS Managers, project teams and other employees who are responsible for climate change related initiatives and improvements.
All employees	Monetary reward	Other (please specify) (Climate change mitigation projects)	Specific company awards such as the CEO Award and Recognition for Excellence Awards, which are either cash or stock, are available for Energy Managers, EHS Managers, project teams and other employees who are responsible for climate change related initiatives and improvements.
All employees	Monetary reward	Emissions reduction project	Specific company awards such as "Above and Beyond the Call of Duty" (ABCD) awards for best practice initiatives in the areas of climate change, energy and carbon reduction.
All employees	Non-monetary reward	Behavior change related indicator	Annually many affiliates continue to perform voluntary awareness and promotion campaigns/programs to increase employees' active participation in Sustainability programs and to make carbon footprint reduction part of the company's culture. Awards and recognition for best practices form a core element of such campaigns.
Other, please specify (Operations employees (the largest business unit within PMI, around 20,000 employees))	Non-monetary reward	Emissions reduction project Energy reduction project Efficiency project Supply chain engagement	Operations employees also have the opportunity to earn awards for best practice initiatives in the areas of climate change, energy and carbon emission reduction. This forms part of our Operations Department ABCD Award and "Lead, Lean and Learn" program which encourages innovation, continuous improvement and employee engagement.
Other, please specify (Employees in our Operations Center)	Monetary reward	Behavior change related indicator	Employees from the Operations Center are encouraged to use public transportation. The annual fee for half-price railway subscription as well as a monthly public transport allowance is paid by the company for those employees who choose to use public transportation rather than commute in their private cars to work, contributing to reduce our carbon emission footprint.

C2. Risks and opportunities

C2.1

(C2.1) Does your organization have a process for identifying, assessing, and responding to climate-related risks and opportunities?
Yes

C2.1a

(C2.1a) How does your organization define short-, medium- and long-term time horizons?

	From (years)	To (years)	Comment
Short-term	0	1	We evaluate short-term profits and losses as part of our annual financial reporting.
Medium-term	1	5	Our annual Long-Range Planning process reviews and sets business direction over a 3 to 5-year horizon. Despite being called PMI's Long-Range Plan, it equates to "medium-term" in CDP terminology.
Long-term	5	15	The physical risks of climate change have the potential to materially impact our business. Therefore, we have conducted climate risk assessments with 2030-time horizon. We chose this time horizon because it is hard for climate models to be more granular and to accurately interpret the data in a longer period.

C2.1b

(C2.1b) How does your organization define substantive financial or strategic impact on your business?

Alongside physical impacts such as rising sea-levels and changing weather patterns, there are transition risks such as new carbon-related regulations and taxes, changes in manufacturing technology and evolving consumer preferences, which can affect business units or the organization due to stakeholder or customer concerns. Being at the forefront of addressing the global challenge of climate change also presents opportunities. Some correlate to good practices such as energy-use reduction and the protection of forests and waterways; others arise through product eco-design and adaptation measures. PMI, alongside many of its suppliers, is working within a context of stabilizing the global temperature rise to below the internationally agreed 1.5-degree Celsius scenario. We understand the potential impacts of climate change across all areas of our operations, particularly upstream in our supply chain.

The climate crisis, as acknowledged by the international community, threatens livelihoods, in particular the most vulnerable people around the world. It impacts human population movement, biodiversity, access to water, global health, food security, and other environmental changes such as soil degradation and desertification. Beyond its human repercussions, climate change could threaten business continuity. This is especially the case for businesses involving an agricultural supply chain. For PMI, costs of raw materials such as tobacco leaf and cloves may rise, and both consumers and our employees are becoming increasingly sensitized to the environmental impact of corporate actions. Upfront expenditures with longer-term returns are required. At the same time, PMI's efforts to reduce its GHG emissions, such as through increased energy efficiency, could alleviate potential costs and create a competitive advantage by meeting or exceeding the expectations of consumers, employees, and other stakeholders.

A substantive financial or strategic impact can vary depending on which of the above aspects of the business are considered as impacted and the potential combination of them. The level of criticality will have different threshold when comparing, for example, impact within our agricultural supply chain (engagement with hundreds of thousands of farmers) and the development of new products or the compliance with regulations on carbon emissions in our factories. Therefore, in PMI, as explained in the below paragraph, we refer to a variety of factors that independently or in combination may affect the achievement of our smoke-free vision.

PMI evaluates a "substantive impact" (e.g.: financial or strategic impact) based on a variety of factors and quantitative indicators including but not limited to the potential impact on financial performance as well as other strategic factors that may affect PMI's efforts and/or delivery towards a smoke-free future, ultimately replacing cigarettes with smoke-free products. The impacts reported as substantive strategic or financial impacts are defined as those identified and prioritized by management in our value chain, through key enterprise risks based on four risk dimensions: the impact a risk could have on the organization if it occurs, the likelihood a risk will occur, the velocity with which a risk would affect the organization if it occurs, and the interconnectivity of a risk with other risks, that exceed defined thresholds at the corporate level.

As part of the Company's annual Integrated Risk Assessment (IRA) process, we have in place an extensive risk control program by which we assess the climate change physical and transition risks. Specifically, in our operations, locations with values exceeding $30 million range are surveyed by engineers from our property insurer, who provide recommendations to us on the magnitude of environmental risks, for example risk of flooding that could cause reduction or disruption in production capacity in specific locations, and the cost of management. Recommendations for risk management are given if the expected reduction in the financial impact of the risk exceeds the cost to meet the recommendations by a factor of 10 or more. Internally, we focus on recommendations above the $50 million range as management of identified risks can involve substantial capital investment and disruption to operations including our supply chain.

In 2020+ risk forecasting terms, in relation to our tobacco supply chain, we assumed as substantive risks those with a potential impact in excess of $5 million or a raw material impact in excess of 1000 metric tons of tobacco leaves. This definition is applicable to PMI's agricultural supply chain.

C2.2

(C2.2) Describe your process(es) for identifying, assessing and responding to climate-related risks and opportunities.

Value chain stage(s) covered
Direct operations
Upstream
Downstream

Risk management process
Integrated into multi-disciplinary company-wide risk management process

Frequency of assessment
More than once a year

Time horizon(s) covered
Short-term
Medium-term
Long-term

Description of process
1) PMI's Enterprise Risk Management practices (ERM) is a three-step, interconnected process designed to assess and manage multidisciplinary risks and opportunities that can have a substantive financial or strategic impact on the company's ability to achieve our strategic business objectives and create value over time. The ERM takes place periodically, with reporting on quarterly basis, covering short, medium- and long-term time horizons. Each step involves multiple stakeholders and results in different types of actions. We identify and prioritize key risk areas based on the impact of a risk on PMI were it to occur, its likelihood, its velocity, and its interconnectivity with other risks. PMI assigns ownership of each prioritized key risk area to a member of our Company Management, with oversight from the Board of Directors or a particular Board committee. With support and insights provided by the risk management and Corporate Audit functions, our Company Management reports regularly on these risks to the appropriate Board committees and to the entire Board of Directors throughout the year. As part of its risk management practices, the company has established a Corporate Risk Governance Committee (CRGC) made up of senior executive officers. At the request of the CRGC, the Risk & Controls function defines the company's approach to risk management and coordinates a periodic enterprise risk assessment. The risk assessment process includes risk identification and evaluation at market, regional and central level, risk prioritization, risk responses definition and deployment and the aggregation of risks into defined risk landscape categories. Outcomes of risk assessments are reported to internal stakeholders at multiple levels and across the company, for an improved decision-making, as well as to external stakeholders (such as regulators and shareholders). Reporting requirements, including frequency, are determined based on report user needs, and the level at which reporting is done. In general, most of ERM related reporting is done quarterly, which is also driving the underlying activities and practices. ESG-related risks and opportunities are considered within our enterprise risk assessment which also leverages the company's sustainability materiality assessment process. More specifically, the priority ESG topics identified by the latest sustainability materiality assessment determine which ESG risks and opportunities are considered in the enterprise risk assessment.

2) Integrated Risk Assessments (IRA) are tailored to the priority ESG issues in direct operations and supply chains previously identified, including climate change, deforestation, and water management. Within the PMI Risk Landscape, climate change risks fall into two key risk areas, namely ESG and Business Disruption. The former says about the inability to implementing an effective ESG agenda, achieving planned targets and reporting ESG results to access sustainable financing, due to a limited capacity of dealing with climate-related risks. The latter refers to the potential disruption of our supply and distribution chains and the inability to operate, because of an inadequate climate-proofing strategy along the value chain. The Business Disruption risk area has been assigned to our Operations SVP. We periodically carry out a Climate Change Risk and Opportunity (CCRO) assessment to understand the exposure to climate-related physical and transition risks over time under different climate scenarios and time horizons, following the recommendations of the TCFD. To date, PMI has mapped 149 climate change transition risks and opportunities across materiality and certainty, and classified in: 'Proactive', 'Reactive', 'Non-material', 'Watch' and 'Potential quick wins'. After further analysis, PMI is now focusing on 18 prioritized Proactive transition risks that have the highest certainty and materiality level. Our assessment of climate-related physical risks pointed out the potential climate impacts on PMI's tobacco growing areas, warehouses, factories, and logistics due to weather related extremes, such as droughts, floods, heatwaves and cyclones, identifying vulnerable hotspots calling for adaptation measures. PMI developed an extensive risk control program to assess and mitigate physical risks from climate change; locations exceeding $30M range are surveyed by engineers from our property insurer, who provide risk management recommendations. As an example, to map PMI's exposure to water scarcity risks, we conduct a global water risk assessment annually in our tobacco supply chain using the World Resources Institute's Aqueduct risk-mapping tool, whose projections of water stress are based on RCP 4.5 and RCP 8.5 climate scenarios. Our 2021 assessment revealed that most of tobacco growing areas show a medium to high water risk. As a result, in the past two years, we strengthened our water stewardship strategy, developing guidance for applying a landscape approach to water optimization projects, protecting natural resources and recharge areas, and improving the efficiency of irrigation systems to integrate better farm water management. To complement our global exercise, we routinely conduct local water assessments, which leverage primary data sources and interviews with stakeholders to gauge both external (at watershed level) and internal (at farm level) water risk on the ground. Since 2018, we have completed 31 local water risk assessments (representing approximately two-thirds of our total tobacco-growing areas), and we aim to cover all tobacco-growing areas by the end of 2025.
Moreover, in 2021 we engaged 253,813 tobacco farmers through the Good Agricultural Practices (GAP) providing them with a set of climate-smart agriculture practices, action plans and monitoring tools to promote a more resilient supply chain to impacts from climate change such as drought, floods, and fires. GAP also supports farmers switching to low carbon curing fuels, such as renewable biomass, minimizing their dependency on fossil fuels for curing and potential impacts due to price fluctuations (transition risks).

3) While IRAs are stand-alone projects developed on periodical basis to tackle specific environmental issues, the Environmental Risk Analysis (ERA) is PMI's main process to identify and manage substantial risks and opportunities at the operational level on a monthly basis. The ERA builds on the IRA to further analyze operational implications from the identified risks and opportunities. Results from the ERA are used by PMI's stakeholders to develop programs, roadmaps, action plans, targets and budgets to either prevent substantial risks from materializing, or to seize opportunities. Results are monitored by each of PMI's relevant department and communicated to the relevant stakeholder on a monthly basis.

C2.2a

(C2.2a) Which risk types are considered in your organization's climate-related risk assessments?

	Relevance & inclusion	Please explain

	Relevance & inclusion	Please explain
Current regulation	Relevant, always included	We are subject to international, national and local environmental and climate-related laws and regulations in the countries where we operate. Relevant regulations are considered in our climate-related risk/opportunity assessment process. In 2019, we finalized our evaluation of climate change risks aligned with TCFD recommendations, confirming its application in 2021; this allowed the identification of transition risks for PMI related, e.g., to an increase in carbon pricing affecting operations manufacturing and logistics, and changes in regulation on energy efficiency levels affecting our factories processes in short term. Examples of these risks are the potential expansion of: -the EU emissions trading scheme, which could include additional PMI sites – e.g., our factory in Romania was included in 2020 due to increased production capacity. This could lead to an increase in PMI's operating costs of purchasing allowances in the future, particularly in high emitting locations in EU. -carbon pricing mechanism across all markets in which PMI operates. We particularly monitor countries with a local ETS scheme already in place, i.e., Canada, Switzerland, South Africa and South Korea. In those countries the risk is rather moderate at the moment due to the emission profile of our manufacturing sites vs. the minimum threshold needed to have a significant financial impact. We closely monitor regulations on minimum threshold and signals of changes in these schemes, and we consider those aspects in the strategic deployment of our manufacturing and supply chain networks including investments to increase energy efficiency. We monitor current regulations in those markets also due to potential risk they can pose in case we would decide to expand the production capacity of our manufacturing sites located there; especially in relation to our RRP products which are more energy intensive compared to conventional products and resulting in increased GHG emissions. The potential impact of this risk is related to higher operating costs. Increase of carbon prices within the EU Trading Scheme which would have a potential impact in our operations if it materializes. This would expose our operations to requirements for increased capital expenditures, taking in consideration the potential for combined heat and power, renewable energy and buildings upgrade, to reduce emission profiles of our sites and mitigate the risk posed by EU ETS carbon prices increase impacting operating cost.
Emerging regulation	Relevant, always included	Our operations throughout the globe are subject to various climate-related regulations, which we consider in our climate-related risk/opportunity assessment process. There is a clear international trend towards proliferating and stricter climate-related regulations which could increase our operational costs. In 2019, we finalized our evaluation of climate change risks aligned with TCFD recommendations, and we reviewed it in 2020 and 2021.This exercise allowed the identification of mid and long term transition risks for PMI business related to technology. In this category, PMI mostly incurs risks related to an increase in carbon pricing affecting operations manufacturing and logistics, and regulation on energy efficiency requirements affecting our factories or mechanized farming processes in the mid and long term. Examples of risks include: - EU Emission Trading Scheme (ETS): risks linked to widening the EU ETS carbon trading market to include EU accession countries where PMI has facilities. - Energy taxes; regulation on Energy Efficiency; Infrastructure/Buildings Directive; promoting energy reduction at source (like in our EU factories); regulations in emerging market, exposing our operations to requirements for increased capital expenditures taking in consideration the potential for combined heat and power; renewable energy and buildings upgrade. - Regulations on energy efficiency in the heavy machinery and heavy-duty transport sector are expected to tighten, and the speed of this change in regulation will be heavily depending on the rate of low carbon transition. Mechanical equipment used on farms is currently both energy intensive and heavily reliant on fossil fuels as an energy source. In particular, these regulations could result in an increase in the speed of the replacement cycle of machinery and equipment by the farmers resulting in higher annual expenditure on replacement to keep pace with efficiency standards. This in turn would cause an associated indirect increase in procurement costs as the price for tobacco will respond to upward pressure on the cost of production. Those regulations could also expose our operations to requirements for increased capital expenditures to mitigate their impact. affecting operating cost.
Technology	Relevant, always included	In 2021 the review of the evaluation of climate change risks aligned with TCFD recommendations conducted in 2019, allowed to further identify mid- and long-term transition risks for PMI business related to technology. The identified risks relate to technology improvements resulting in existing equipment becoming either non-compliant with upcoming energy regulations and/or too expensive to run due to the higher costs of fossil-fuel within our own operations and supply chains. Existing equipment would need to be replaced with associated costs of adopting new tech, exposing our operations to requirements for increased capital expenditures. In addition, in 2020 we submitted our revised absolute reduction Science Based Targets (SBT) aligned with a 1.5°C scenario, which were approved by SBT initiative. PMI's decarbonization path to achieve new SBTs will need to be more aggressive, while RRP production growth will drive increase in energy consumption and related GHG emissions. A strong investment in new tech will be needed to achieve the decarbonization path that we have committed to, with the risk that despite our investments we may not be able to achieve our SBT commitments due to RRPs being more energy voracious. PMI's risks also relate to not following technological advancements (e.g. low energy efficiency equipment), investing in obsolete technologies (e.g. non-regenerative agricultural practices) and higher costs/polluting technologies (e.g. fossil-fuel based tech) when developing new drivetrain technologies, new farming and curing techniques and equipment, new tech in retail and new product design. All these risks exist, and PMI needs to ensure neither it nor its suppliers invest in obsolete technology to remain up to date with technological development within its own operations and supply chains. This can be costly and potentially impact operating costs if not mitigated. We continuously assess risks related to technological improvements that support the transition to a lower-carbon and energy-efficient business model. An example of this risk is related to our electronics manufacturing suppliers which are key to achieve our smoke-free future goal. We assessed through LCAs the risk of carbon footprint increase due to new electronics suppliers and the impact if they would not invest in low carbon technologies to mitigate the emissions in their processes and resulting in PMI potentially not being able to meet its carbon reduction SBT commitments.
Legal	Relevant, always included	We are subject to international, national and local environmental laws and regulations in the countries we operate. We have specific programs across our business units designed to meet applicable environmental compliance requirements to reduce our carbon footprint, wastage, water and energy consumptions and prevent any climate-related mitigation claims. Our subsidiaries expect to continue and/or increase expenditures in order to drive improved performance and maintain compliance with environmental laws and regulations, as first of all, compliance which such policies and regulations are core to the way PMI operates; moreover as non-compliance could results in fines, or even in partial or total withdrawal of the operation permit. We assess and report the compliance status of all our legal entities on a regular basis. Based on the management and controls we have in place and our review of climate change risks (both physical and regulatory), environmental expenditures have not had, and are not expected to have, a significant adverse effect on our consolidated results of operations, capital expenditures, financial position, earnings or competitive position. In 2019, we finalized our evaluation of climate change risks aligned with TCFD recommendations, and we confirmed it in 2020 and 2021.This exercise allowed the identification of mid and long-term legal transition risks for PMI business, including those triggered by changes in climate policy or regulations. Legal compliance to such policies and regulations changes are core to the way PMI operates but may result in increased operational costs for PMI, such as: - increasing procurement costs linked to higher cost of raw materials and the cost of production; - impacting logistics and operations through increased carbon pricing; - affect mechanized farming processes through new regulation on energy efficiency requirements; and - impacting tobacco curing activities through additional regulation on fuel type, such as more stringent regulation on biomass production and wood harvesting from forest areas PMI has not been subject to significant fines, in the reporting year, related to environmental regulations specific to climate change.
Market	Relevant, always included	In 2021, we continued our evaluation of climate change risks aligned with TCFD recommendations, which confirmed the identification of transition risks for PMI business related to market changes, such as shifts in supply and demand for certain commodities, products and services. For PMI this includes risks of increasing costs of sourcing (including materials such as water and diesel) and increasing costs for suppliers, resulting in higher procurement costs. It also includes increasing competition for agricultural land, leading to less available or more expensive land for tobacco growing. Other market risks are related to PMI's investors and financial performance and include the inclusion of climate risk metrics by credit rating agencies, affecting PMI's score, and a general trend of investors moving away from carbon-intensive sectors. Finally, downstream market risks are associated with shifting consumer demands for lower-carbon products. Concrete examples of how risks are assessed are described below: 1. Diesel is widely used in many farming practices. Energy is a significant cost in farming practice within PMI's agricultural supply chain in relation to the mechanical equipment used. If diesel prices increase, the overall cost of producing raw tobacco at directly contracted farms, as well as the cost of sourcing tobacco from third-party leaf suppliers, will increase as a result. This in turn would cause an associated indirect increase in procurement costs as the price of tobacco will respond to upward pressure on the cost of production. Under transition pathways aligned to 2 degrees scenario or below, the oil demand will be lower than under scenarios associate with greater temperature increases. As such expected increase in oil prices and indirectly tobacco prices paid by PMI would be lower in a 2-degree scenario. 2. We track commodities (pulp, aluminum, glycerin, ethylene, mint crystals, guar seeds, coconut shell to name a few) through market indicators (RISI, ICIS, IHS or MCX) that provide directional pricing, its volatility and supply chain scenario analysis of the commodities allowing PMI to provide visibility on the source of its product and ensure suppliers comply with relevant (industry, regional, international) regulation(s). 3. A market risk associated to the increase in costs of input materials and fuels (both fossil fuels and biomass) for farmers in relation to tobacco curing process, which could indirectly impact PMI's procurement expenditure.

	Relevance & inclusion	Please explain
Reputation	Relevant, always included	Stakeholder interest and expectations in climate change adaptation are increasing as the effects of climate change become more apparent, society is asking businesses to become part of the solution changing their practices. NGOs campaigns can impact companies' reputation and have business consequences on license to operate and bottom line. PMI aims to combat climate change and set actions to act upon it. Those actions are conducive to substantiate PMI's leadership in sustainability as integral part of the success of its business transformation. Thus climate-related reputational risk is included into PMI's risk assessments considering the potential risk it could have on the long term success of the company. In 2021, we continued our evaluation of climate change risks, aligned with TCFD recommendations and identify transition risks related to the reputation of PMI as a sustainability leader in the area of climate change; this evaluation included a survey of opinions of certain PMI stakeholders on how PMI contributed to or detracted from the transition to a lower-carbon economy. PMI identified that reputational risks can be driven by multiple factors including financial performance, investors' priorities, reporting requests, internal workforce concerns around sustainability, and challenges related to raising capital for the agriculture sector as a carbon intensive one. E.g., PMI identified failure to address enhanced reporting requests as a potential reputational risk for the company. Increased reporting not only requires additional internal resources, but also exposes the company to a broader stakeholder community and sectoral benchmarking. PMI manages this risk by having an internal reporting team that coordinates reporting initiatives, as well as engagement with external consultants to ensure consistency through multiple reports, transparent communication, effective benchmarking against relevant sustainability ratings and the use of best practice methodologies and standards. We also conduct periodically a sustainability materiality assessment with a broad range of stakeholders. We strengthened our communication through our reporting. Our Integrated Report 2021, which covers our sustainability work, sought to align with the IIRC, GRI and SASB frameworks as well as with the recommendations of the TCFD and requirements of the CDP and other sustainability ratings; those documents and additional content can be consulted in our website.
Acute physical	Relevant, always included	Extreme weather events due to climate change have the potential to significantly impact our operations, buildings and suppliers, therefore having a substantive impact on our supply chain and on our business continuity plan. Flooding or typhoons can damage our buildings and goods, as well as the crops of our farmers and our logistics networks. In 2015, PMI performed a comprehensive Climate Change Risk Assessment (CCRA) for corporate and asset level physical risks and opportunities up to 2025-2030. This assessment was reviewed in 2021, to align with TCFD recommendations, and complemented with the water physical risks in 2021. The Water risk assessment was conducted using the WRI Aqueduct tool to determine the global risk factors that affect the areas where we operate and source tobacco from. The risk assessment process included key assets such as factories/warehouses, supplier's processing facilities/warehouses, as well as ports, and tobacco growing regions. Some of the risks identified in our own operations, and tobacco supply chain were those resulting from flooding and cyclones, e.g., in Brazil, Philippines, and Indonesia, which could lead to building and goods' damage, as well as crop losses to our farmers and disruptions to our logistics networks. In our manufacturing site in Indonesia, this could cause damage due to business interruption in the range of $0.4 million to $3.5 million, while in our tobacco growing areas in Brazil and Philippines could cause interruptions in our supply chain with a financial impact ranging from $3 million to $16 million This information is reviewed regularly with top management; it enables risk/opportunity identification and management at the company and asset level, and includes regulatory climate change aspects and geopolitical risk. Our substantial tobacco leaf inventories can help mitigate short to medium term impacts.
Chronic physical	Relevant, always included	Longer term weather shifts due to climate change have the potential to significantly impact our operations, assets and supply chain therefore having a substantive impact on our supply chain and on our business continuity plan. In 2015, PMI performed a comprehensive Climate Change Risk Assessment (CCRA) for corporate and asset level physical risks and opportunities up to 2025-2030. This assessment was confirmed in 2021, to align with TCFD recommendations, and complemented with the water physical risks in 2021. The Water risk assessment was conducted using the WRI Aqueduct tool to determine the global risk factors that affect the areas where we operate and source tobacco. The risk assessment process included key assets such as factories/warehouses, supplier's processing facilities/warehouses, as well as ports, and tobacco growing regions. Results from the risk assessment process are reviewed regularly with senior management, enabling risk/opportunity identification and management at the company and asset level as well as in our logistic networks and supply chains. For instance, drought and water stress may impact our manufacturing operations, e.g. our facilities in Italy and Poland, due to the fact that water is essential for our production processes (products and for utilities), and therefore exposing our operations to requirements for increased capital expenditures to prevent business disruption due to water unavailability. The business interruption cost in our own operations is estimated in the range of $3.2 million to $25.7 million over the long term. The same risk in our tobacco supply chain in the growing regions of Indonesia, where we source tobacco and clove, could have adverse impacts both on quality and yield and result in potential financial impact of $3.4 million to $12.9 million over a long-term period. Similar issues would occur with accelerated land degradation in Africa due to droughts or accelerated desertification of areas where deforestation is taking place. This is one of the core problems that PMI is addressing through its Good Agricultural Practice program.

C2.3

(C2.3) Have you identified any inherent climate-related risks with the potential to have a substantive financial or strategic impact on your business?

Yes

C2.3a

(C2.3a) Provide details of risks identified with the potential to have a substantive financial or strategic impact on your business.

Identifier

Risk 1

Where in the value chain does the risk driver occur?

Direct operations

Risk type & Primary climate-related risk driver

Current regulation	Carbon pricing mechanisms

Primary potential financial impact

Increased direct costs

Climate risk type mapped to traditional financial services industry risk classification

<Not Applicable>

Company-specific description

Our operations throughout the globe are subject to various climate-related regulations. There is a clear international trend towards increasing and stricter climate-related regulations which could increase our operational costs.

These include but are not limited to CO2 related trading schemes such as the EU Emission Trading Scheme (EU ETS). As of December 31, 2021, PMI owned and operated a total of 3 factories in the Netherlands, Italy and Romania covered by the EU ETS, with total verified emissions of over 66,000 metric tons of CO2e. PMI doesn't have, for the time being, other factories in the EU and EU accession countries which could become subject to EU ETS. Although the cost of EU ETS carbon credits has been lower in the past several years due to a large surplus of allowances, the cost of allowances has increased lately and is expected to further rise.

According to the European Commission, allocation to industrial installations received 80% of the free allowances in the 2013. This proportion has been decreasing gradually year-on-year, down to 30% in 2020.

The revision for phase 4 (2021-2030) of the revised EU ETS directive will trigger more stringent greenhouse gas emissions reduction target with a mix of interlinked measures, among which, an increase of the pace of emissions cuts at an annual rate of 2.2% as of 2021.

This could lead to an increase in PMI's operating costs of purchasing allowances in the future, particularly in high emission locations in EU markets.

The potential identified risk is to see the production prices increase impacting operating costs.

We closely monitor if regulations on minimum threshold in these schemes are changing and signals of new emerging regulations and we consider those aspects in the strategic deployment of our manufacturing and supply chain networks including investments to increase efficiency.
If this impact reveals to be substantial, we would focus our efforts to increase energy efficiency in those factories.

Time horizon
Medium-term

Likelihood
Likely

Magnitude of impact
Medium-low

Are you able to provide a potential financial impact figure?
Yes, an estimated range

Potential financial impact figure (currency)
<Not Applicable>

Potential financial impact figure – minimum (currency)
2640000

Potential financial impact figure – maximum (currency)
5280000

Explanation of financial impact figure
Although the cost of EU ETS carbon credits has been lower in the past several years due to a large surplus of allowances, the cost of allowances is expected to increase due to stricter regulations and more significant long-term reforms to reduce oversupply. According to the European Commission allocation to industrial installations received 80% of the free allowances in 2013. This proportion has been decreasing year-on-year, which could lead to an increase in our operating costs of purchasing allowances in the future. Based on a comprehensive review of policies and methodologies (price corridor from ICPC), we recognize the importance of defining a carbon price per ton of CO2e that will remain stable over time and ensures that climate transition risks are embedded in capital expenditure decisions (i.e., in order to allocate capital for the best return in terms of carbon reduction and cost-effectiveness). Since 2020, as we step up our ambition to reduce carbon emissions, aligned with the 1.5-degree trajectory, we apply an internal methodology to model a Shadow Carbon Price integrating in today's shadow carbon price evaluation, the transition risks 10 years in advance for a forward-looking approach. In 2021 exercise, for example, the PMI's shadow carbon price was set at $65 per ton of CO2e.
We estimate the potential financial impact to be between $2.64million and $5.28 million considering:
- the above and a worst-case scenario of constant emissions as of 2021 (whereas emissions due to the growth of production capacity are evened out by improvements in energy efficiency and other mitigation measures);
- the carbon footprint profiles of our 3 factories in EU ETS scheme in 2021 and applying an annual cost of emissions allowances forecast to be between $40 and $80/tCO2 in the medium term.
The calculation applied is the following:
66,000 t/CO2e (representing the emissions of the 3 factories) * $40 = $2,6400,000
66,000 t/CO2e (representing the emissions of the 3 factories) * $80 = $5,280,000

Mitigation measures have been anticipated to ensure that carbon tax will be kept as minimal as possible.

Cost of response to risk
20400000

Description of response and explanation of cost calculation
Our plants have undergone an energy efficiency program to ensure that the carbon tax will be kept as minimal as possible, further aiming to reduce below threshold in the future and be exempted from the scheme.
We manage the risk through our Energy Management Program (EMP), which consists of energy consumption monitoring (EMS) and investments in energy conservation and efficiency improvement projects. We have an energy monitoring and targeting system in place, with an annual cost of $200k. Drivers like EU ETS and EU EED led us to consider process changes (e.g., replacement of combustion equipment to more efficient ones that can potentially reduce our energy load to below the 20MW regulatory threshold). From 2014-2018 we delisted certain sites from EU ETS as they fell below the total combustion capacity threshold. Our EMP enables us to analyze consumptions and serve as basis for potential carbon tax exemptions and "cost to comply" reductions with the EU ETS and has an annual set budget of around $10M.

We use a shadow carbon price (SCP) set at $65/tCO2e as an internal lever to accelerate carbon emissions reduction. PMI's SCP is integrated into the financial evaluation of projects that will impact our carbon emissions (favorably or unfavorably); in 2021, it led to the approval of 8 carbon emission reduction projects as part of our energy saving initiatives (ESI) program in our manufacturing sites. The ESI program has a timescale for implementation by 2026.
Also, in 2021 we developed an internal tool to create a portfolio of zero-carbon technologies (ZCT) and assess them against specific risks and attributes, aiming at increasing energy self-generation in our manufacturing sites through innovative technologies by 2025. E.g., in our manufacturing site in Italy, a complex solution space has been developed in 2021, incl. the site's electrification plans to enable exiting EU ETS and de-risking externalities related to energy and ETS price volatility. A mix of technologies from thermal electrification via heat pumps, electric boiler and in-house PV plants are expected to be operational by 2025. Such system will be delivering 62 GWh annually, improving at the same time the overall heat generation efficiency by 6%, against an investment of approx. $10.2million.

Our annual cost of management is the sum of investments in energy conservation and efficiency initiatives (approx. $10M), investment in ZCT (approx. $10.2M) and the EMS operating costs ($200k).

Comment
The EU ETS scheme has been an additional driver for the implementation of our energy efficiency program at global scale to anticipate the clear international trend towards increasing and stricter climate-related regulations which could increase our operational costs. Our activities in this area fall under the scope of our Drive 4 Zero program, which aims to eliminate economic losses caused by inefficient energy use. Under the program, we look for industrial and manufacturing solutions such as heat recovery and manufacturing-process optimization. We also promote behavioral change through our Zero Loss Mindset program to eliminate energy losses. Design standards include low GHG building practices, e.g., for materials and efficient lighting. For instance, in 2021, we deployed across all our manufacturing sites a new learning algorithm that allowed us to upgrade our ventilation and air conditioning system, decreasing the energy required to release the same humidity and temperature factory conditions by around 20 percent.

Identifier
Risk 2

Where in the value chain does the risk driver occur?
Upstream

Risk type & Primary climate-related risk driver

Acute physical	Heavy precipitation (rain, hail, snow/ice)

Primary potential financial impact
Increased direct costs

Climate risk type mapped to traditional financial services industry risk classification
<Not Applicable>

Company-specific description
In the short- to long-term most of PMIs sourcing regions face risks due to physical climate change events, such as cyclones, floods and others, potentially affecting our tobacco suppliers' capability to deliver on contracted volumes globally, e.g., in Brazil, which is among PMI's top 15 tobacco origins. Changes in precipitation patterns and extreme variability in weather patterns could affect the yield, quality and availability of the tobacco crops, triggering a substantive risk in case the potential financial impact is above our threshold (1000 metric tons of tobacco leaves), resulting in sourcing plans modification and increasing operational costs. A substantive impact in Brazil could have the potential to delay deliveries of tobacco, significantly affecting the production cycle all the way to the product. In 2021 hailstorms, droughts and other climate related events in Brazil impacted tobacco farmers, causing important crop losses; about 20,000 ha of production in the South regions were impacted due to extreme weather events mainly hail and drought. The volume losses experienced by tobacco farmers were volumes already contracted by PMI. We had to work on a contingency plan with our suppliers to fulfil our volume requirements. The volumes had to be booked in a short time window thus reducing the power of negotiation that is typical of pre-booked volumes and potentially impacting the price above the substantive impact threshold of $5 million. Extreme rainfall in the fields may require pumping of excess water; while extreme droughts could require long-term irrigation, both of which would increase tobacco production costs above our substantive financial impact threshold. Changes in precipitation patterns could also affect local logistics, with extreme precipitation events potentially leading to inaccessibility of road networks, disrupting the delivery of tobacco.

Time horizon
Long-term

Likelihood
More likely than not

Magnitude of impact
Medium

Are you able to provide a potential financial impact figure?
Yes, an estimated range

Potential financial impact figure (currency)
<Not Applicable>

Potential financial impact figure – minimum (currency)
4000000

Potential financial impact figure – maximum (currency)
15800000

Explanation of financial impact figure
The potential financial impact range is based on a long-term assessment of costs from physical climate change risks related to extreme weather events in our tobacco origins in Brazil in a given year. The range of potential financial impact is derived from previous years' data on crop losses due to extreme weather events, which could lead to increase tobacco production costs as PMI has to look for alternative volumes to be purchased in a short time window, combined with our comprehensive climate change risk assessment tool. Setting the basis as PMI threshold for substantive financial impact (1,000 metric tons of tobacco leaves) for the specific case of Brazil, the lower range results in an estimate 3% (of the sourced volume or spend). The upper range reflects an estimation of 10% (of the sourced volume or spend) based on historical crop loss data (actual impacts reported) and our modelling projection. We estimated the relative magnitude in a range of around $4-15.8M per year while we foresee this risk in the short to long-term (>6 years) for the Brazilian growers due to supply chain disruptions arising from extreme weather events such as excessive rain fall, hail and drought, and combining estimated costs due to disruption from crop losses, quality impacts and supply chain restrictions.
The costs' estimation takes into account the above factors, however, due to their inter-correlation, our modelling provides a bottom and top range.

Cost of response to risk
505000

Description of response and explanation of cost calculation
The cost of response is based on the set yearly budget allocated in 2021 to environmental projects under the Good Agricultural Practices (GAP) program implementation in Brazil. GAP program is PMI's main initiative to tackle physical climate risks within the company's tobacco supply chain, as identified through our Strategic Enterprise Risks and Company's Integrated Risk Assessment processes. GAP program provides suppliers with a set of climate-smart agriculture practices, action plans and monitoring tools to promote a supply chain that is more resilient to impacts from climate change such as hail, drought, and floods. Under GAP, projects are implemented within the timeframe to achieve environmental targets on annual basis as well as the long-term objectives to 2025 and 2030. In Brazil's southern region in 2021, near PMI's manufacturing facility in Santa Cruz do Sul, focusing on increasing the resilience of natural ecosystems to better protect local communities and their economic activities in tobacco growing areas. Around 47,500 contracted farmers supply tobacco to PMI (directly or via third-party suppliers) within the region and GAP initiatives focus on water source protection and landscape conservation practices related to tobacco farming incl. monitoring and training at farm level. In Brazil around 330 field technicians work year-round with the contracted farmers and suppliers of tobacco to PMI, visiting the farms on average five times during the crop season to monitor projects implementation. Additionally, technology is also being deployed; e.g., PMI is using drones to map and scout tobacco fields in North-East Brazil, generating live data for decision making on crop management.
In 2021, the cost of these initiatives was around $505,000 incl. the total cost of on farm water management and water stewardship activities (e.g., spring protection projects) at landscape level, together with the roll out of a specific "on farm and next to the farm" biodiversity conservation program. 50% of the expenditure is coming from implementation of forest protection, renewable fuels and good agricultural practices programs incl. training, stakeholder engagement and verification of reported results. PMI's investment in these initiatives is included in the cost of response and represented approx. 10% of the global 2021 expenditure in environmental projects, similar yearly expenditure is expected over the next 10 years to support mitigating short to medium term impacts.

Comment
PMI plans to maintain similar level of investment over the next 10 years.

Identifier
Risk 3

Where in the value chain does the risk driver occur?
Upstream

Risk type & Primary climate-related risk driver

Market	Increased cost of raw materials

Primary potential financial impact
Increased direct costs

Climate risk type mapped to traditional financial services industry risk classification
<Not Applicable>

Company-specific description
Increased production costs for farmers in the supply chain can be due to changing input prices, specifically diesel costs. For PMI this has an impact on procurement expenditure on tobacco from third-party leaf suppliers and directly contracted farmers. Due to fuel cost relevant weight over the other cost components, an increased cost of fuel for agriculture could result in an increase of the final tobacco price.
Diesel is widely used in many farming practices, including transportation and the operation of mechanical equipment. PMI and its supply chain purchases of tobacco are influenced by the cost of production for farmers, whereas energy used to run mechanical equipment represents a significant part of that cost. Approximately 96% of our purchased volume comes from mechanized farms consuming on average between 170 and 430 liters of diesel per hectare of tobacco, depending on the mechanized activities and the soil type.
If diesel prices increase, the overall cost of producing raw tobacco at directly contracted farms, as well as the cost of sourcing tobacco from third-party leaf suppliers, will increase as a result. Based on data collected though surveys in farms where diesel expenditure represented up to 10% of the overall cost of production, this in turn would cause an associated indirect increase in procurement costs as the price of tobacco would respond to upward pressure on the cost of production. Specific markets may be more susceptible to fuel price fluctuations as they are characterized by farms more dependent on mechanized activities, for example in tobacco farming in Argentina, US and Italy where the adoption of mechanized activities is above the global average; the three markets are within PMI's top 15 sourcing markets causing the sourcing strategy to be likely affected by a significant fluctuation in diesel price for agriculture. A key factor in diesel prices is global oil prices, which are expected to have different developments depending on the transition pathway taken at a global level. Under transition pathways aligned to 2 degrees scenario or below, the oil demand will be lower than under scenarios associated with greater temperature increases. As such the expected increase in oil prices and indirectly tobacco prices paid by PMI is lower in a 2-degree scenario.

Time horizon
Long-term

Likelihood
More likely than not

Magnitude of impact
Medium-low

Are you able to provide a potential financial impact figure?
Yes, an estimated range

Potential financial impact figure (currency)
<Not Applicable>

Potential financial impact figure – minimum (currency)
110000000

Potential financial impact figure – maximum (currency)
225000000

Explanation of financial impact figure
Diesel price was modelled between 2017 and 2030 using the International Energy Agency (IEA) scenario data for projected oil price, and the assumption that the ratio between oil and diesel price would remain constant. The cost of diesel to farmers as a portion of total cost of production was estimated using an internal model and a proxy based on diesel and oil prices from public data sources on typical cost shares for similar agricultural commodities applied to the mechanization profile of PMI's farmer base (pro-rata based on volumes sourced yearly).
This share was then applied to the current and future forecasted procurement spend on tobacco by PMI each year. It was then assumed that the PMI tobacco procurement expenditure would remain constant in a business-as-usual scenario and increase by the same rate as diesel price under climate change scenarios. The result after the application of the aforementioned calculation methodology, and factoring farmers' uptake of new technologies, renewables and future forecasted tobacco requirements, was that the potential financial impact of the risk is estimated in a range of $110 million to $225 million per year if not mitigated, while we foresee this risk in the short to long-term (>6 years). PMI's response and mitigation strategy are described below.

Cost of response to risk
5300000

Description of response and explanation of cost calculation
Since 2002 PMI has implemented the Good Agricultural Practices (GAP) program. GAP is a program with mandatory requirements for our tobacco suppliers and their contracted farmers, which provides specific guidance on initiatives to mitigate tobacco growing risks and impacts related to climate change. Strategic initiatives include improving efficiency and switching to low-carbon energies, making tobacco suppliers, their farmers and PMI more resilient to price increments on diesel.
The cost of response is based on the yearly budget allocated to environmental projects in 2021 (mainly related to climate change, water security and biodiversity) and crop efficiency improvement projects under the GAP program implementation across all regions, accounting for approx. a set annual budget of $5.3 million in expenditures for initiatives within our tobacco supply chain including but not limited to the adoption of improved and innovative practices by the farmers. Within the GAP budget we work on a timeframe that matches our SBT to reduce Scope 3 by 50% by 2030 and carbon net zero target by 2040 with initiatives that aim at decreasing the use of crop inputs without influencing negatively farm outputs (e.g., yield per hectare). Our effort to reduce dependency from fossil fuels has led our contracted farmers, especially in Brazil, to significantly decrease tillage practice. The achievement does not only impact positively on CO2 emissions and cost of production but supports our biodiversity program by protecting soil and contributing to stabilize ecological relations in local microfauna. In 2021, gradual switch to renewable sources and barn efficiency improvements led to:
- 75% of flue-cured tobacco we purchased was cured using renewable and traceable fuels (mainly in Pakistan, the Philippines, Italy, Spain, Malawi, Mozambique, Mexico, Brazil and Argentina);
- 44% of the fuel was sustainably sourced firewood (and 31% other biomass);
- flue-curing GHG emissions intensity was 64% lower in 2021 (vs. 2019 baseline)
- reduction of 302,703 tons of CO2e vs. 2019 baseline
- the improvement of tobacco curing barn efficiency lowering fuel consumption through structural and thermodynamic interventions;
- increased collaboration with PMI Leaf suppliers fostering additional collaboration on climate change related risks, and in other areas with potential positive impact on our business and share value with society.

Comment
PMI plans to maintain similar level of investment over the next 10 years.

Identifier
Risk 4

Where in the value chain does the risk driver occur?
Upstream

Risk type & Primary climate-related risk driver

Acute physical	Other, please specify (Drought, flooding and cyclones)

Primary potential financial impact
Increased direct costs

Climate risk type mapped to traditional financial services industry risk classification
<Not Applicable>

Company-specific description
Based on GermanWatch's annual Climate Risk Index (2021), the Philippines is in the top 5 countries (4th) most affected by climate change impacts (including cyclones and flooding) resulting in an average loss of $3.2 billion in purchasing power parity to the country from 1999 - 2019. The supplies of tobacco leaf in Philippines (one of PMI's top 15 tobacco sourcing countries), coupled with negative impacts on tobacco crop quality, and supply chain manufacturing restrictions due to increased severity and frequency of extreme weather events could impact PMI's production and tobacco sourcing strategy, leading to increase in direct costs for PMI, suppliers and farmers. Tobacco leaf growing can be strongly affected by small changes in physical climate conditions such as changes in temperature and precipitation. Yield, quality and availability of tobacco crops could be negatively impacted by changes in precipitation and periods of drought, which have increased in frequency in recent years. This could affect PMI´s access to tobacco supplies, impacting crop buying patterns and operational costs, affecting PMI manufacturing operations and business directly. We consider a range for the increase in our operational cost between 16 and 32% given by our modelling and estimation of medium-long term impact of adverse extreme climate events on our supply chain in the Philippines. In case of significant damage to the crop we would be forced to look for alternative sourcing areas within the country in a short time, significantly impacting our power of negotiation. This would also cause additional efforts in defining supply chain logistics and approaches, thus driving up the total cost of tobacco sourcing and unfavorably impacting the market budget for Philippines.

Time horizon
Long-term

Likelihood
Likely

Magnitude of impact
Medium

Are you able to provide a potential financial impact figure?
Yes, an estimated range

Potential financial impact figure (currency)
<Not Applicable>

Potential financial impact figure – minimum (currency)
2800000

Potential financial impact figure – maximum (currency)
5500000

Explanation of financial impact figure
The potential financial impact range is based on a long-term assessment of costs from physical climate change risks related to drought, flooding and cyclones for the specific case of the Philippines. The lower range derives from our comprehensive climate change risk assessment tool combined with the threshold defined for the substantive financial impact, resulting in a 16% estimate (applied either to the sourced volume or spend). The upper range reflects an estimation of 32% based on our modelling projection of the expected change for this country with climate change (worst case scenario). We estimated the relative magnitude between $2.8-5.5 million per year while we foresee this risk in the short to long-term (>6 years) for the Filipino growers due to supply chain disruptions arising from physical risks such as drought, flooding and cyclones, and combining estimated costs due to disruption from crop losses, quality impacts and supply chain restrictions.

Cost of response to risk
21000

Description of response and explanation of cost calculation
We implement globally our Local Risk Assessment (LRA) methodology utilizing granular local data to highlight water-related risks and engaging local stakeholders including local Leaf suppliers. PMI utilizes the LRA results to implement initiatives with farmers to improve agricultural resiliency to flooding and drought such as the case in the Philippines where the results of the LRA performed in 2021 will lead to the planning and implementation of interventions in 2022. An example of interventions carried out through previous LRAs in the Philippines is the irrigation viability project, which prevents negative impacts from water discharges after irrigation during the growing stage of tobacco cultivation. This project addresses water availability and quality at local level, mitigating potential negative impacts due to drought, flood and cyclones. Another example is the identification of moderate risks of flooding and seasonal variability in the local risk assessment, which has resulted in interventions focused on mulching and cover crops and training farmers to be proactive in adapting to the annual variability by utilizing weather forecast data. To ensure business continuity, PMI has substantial inventories of tobacco leaf which can help mitigate short term impacts.
The cost of response is based on the yearly budget allocated to the Philippines in 2021 for environmental projects under the Good Agricultural Practices program, accounting for approx. $21,000 in internal investment. The engagement with tobacco suppliers to drive improvements in crop management and environmental protection practices in the Philippines are included in the cost of response and represented approx. 0.4% of the global expenditure in sustainability projects for tobacco from our 2021 GAP budget. In 2021, we continued to implement projects focused on water source protection, water management practices and landscape conservation practices related to tobacco farming, contributing to increasing the resilience of the local agricultural system, in response to increasing physical risks such as drought, flood and cyclones.
The expected timeframe of completion of this response is 2025, following our updated sustainability roadmap which includes PMI's targets to optimize water usage across our supply chain. This timeframe is revised annually as part of our risk assessment process and adjusted to reflect any changes arising from additional water interventions that are needed to mitigate these risks

Comment
PMI plans to maintain similar level of investment over the next 10 years.

Identifier
Risk 5

Where in the value chain does the risk driver occur?
Direct operations

Risk type & Primary climate-related risk driver

Chronic physical	Other, please specify (Increase water stress, droughts and riverine flood)

Primary potential financial impact
Increased indirect (operating) costs

Climate risk type mapped to traditional financial services industry risk classification
<Not Applicable>

Company-specific description
In 2021 we updated our water related physical risks, that are also integrated in our TCFD Climate Change Risks and Opportunities (CCRO) assessment. This water risk assessment was performed with the use of WRI Aqueduct.
The identified water risks related to climate change were physical (chronic & acute). Throughout the overall portfolio of the manufacturing sites, 4 strategically significant factories were identified at “high risk” or “extremely high risk” toward water stress, droughts and/or flood (by flood we mean riverine flood), as result to the shift on the precipitation patterns. At our manufacturing sites, high quality freshwater is used for WASH (Water Access Sanitation and Hygiene) services, and for manufacturing processes including the preparation of flavors, liquid products, in several stages of the tobacco processing, among others. Good quality fresh water is also an ingredient in the manufacturing process of our RRP products which are expected to have an increased importance in PMI’s strategy in the future. PMI expects its direct dependency on water to increase in the short to medium term (up to 5 years), as the company will transition to RRP which are more water-intensive in their manufacturing processes.
More specifically, our manufacturing facilities in:
a) Italy, 2 sites, are directly exposed to potential disruptions in production capacity due to water stress and drought. One site was responsible for about half of PMI’s total production of heated tobacco units (HTUs). Our second site is a HTUs manufacturing center and is important in PMI operations, not for its manufacturing capacity, but for the capability to evaluate manufacturing optimization practices.
b) Indonesia, one site responsible to produce around 8% PMI’s total cigarettes production, is exposed to riverine flood.
c) Poland, one site, responsible to produce around 11% of PMI’s total cigarettes production, is exposed to drought.

Several water efficiencies, reuse, recycling and conservation projects have been implemented in order to increase resilience in drought and water stress and in Indonesia, our insurance and business continuity management plans are designed to mitigate the impacts from short and medium-term flooding events.

Time horizon
Long-term

Likelihood
More likely than not

Magnitude of impact
Medium

Are you able to provide a potential financial impact figure?
Yes, an estimated range

Potential financial impact figure (currency)
<Not Applicable>

Potential financial impact figure – minimum (currency)
3210000

Potential financial impact figure – maximum (currency)
25680000

Explanation of financial impact figure
We estimate the relative magnitude at the range of $3.2 million to $ 25.6 million in the medium to long term (4-6 years) for our operations based on potential disruptions in production capacity and current production data, as well as per our insurance’s estimations (i.e.: in case of a minor event to all four sites, the sum of the cost of disruption is about $3.2M and in case of a major event to all four sites the sum of the cost of disruption is about $25.6M; the financial impact was estimated based on the size of each one of the four manufacturing sites and the respective business disruption period, in the case of minor and a major event; the impact in each site ranges from $0.20M for minor event in the smaller site in Reno, Italy, up to $14.9M for a major event in the biggest of these manufacturing sites, again in Italy in Samoggia river basin), not having experienced yet such an event. This impact is split 59% in our facilities in Italy, 15% in our facility in Indonesia and 26% in our facility in Poland.
PMI's range of potential financial impacts related to water impacts is developed by estimating potential losses related to minor and major business interruptions. This assessment is carried out on a per facility basis considering the total cost of business interruption per day based on production costs (excluding raw materials). These costs mainly represent labor costs from business disruption, as production would not be able to continue. PMI's estimated range of financial impacts can be broken down as in the formula below; the actual number of days of business interruption will depend on the site’s ability to recover from an event:

Minimum financial impact = Number of interruption days in minor event * non avoidable operating cost per day
Maximum financial impact = Number of interruption days in major event * non avoidable operating cost per day

Cost of response to risk
4754000

Description of response and explanation of cost calculation
PMI’s response is already underway and has been primarily focused on reducing water dependency on withdrawals through the implementation of water saving initiatives in our factories. The cost response to the water risks, is calculated separately in each site and reported here as a sum of around $4.754 million, allocated as 77% in Italy, 21% in Indonesia and 2% in the facility in Poland.

PMI implemented several technologies, aiming to reduce water withdrawals in our facilities in Italy during 2021. The cost of response related to the design and implementation of these interventions was $3.6 million. Some of the key interventions included:
- use of reject water from reverse osmosis in cooling towers;
- water usage standardization and setting optimization
-waste water treatment plant water reduction for pump’s backwashing
-secondary deodorizing optimization

The cost of response ($ 1 million) for our facility in Indonesia is estimated based on recurring cost of external providers used to assess flood and business continuity risk annually, and related staff costs. Flood risk assessments are undertaken at the site level to understand how vulnerable sites are to cyclones/local flooding events. These

assessments provide a better understanding on the scale and nature of this risk and our insurance and business continuity management plans are designed to mitigate the impacts from short and medium-term (0-5 years) flooding events.

In Poland, since 2013, several water efficiency, reuse recycling and conservation projects have been implemented including several modernization initiatives. In 2021 the implementation of an additional water efficiency project to turn off condensate cooling of the FTD was implemented, which is expected to reduce water withdrawals by 2,000 m3 per year.

The expected timeframe of completion of this response is 2025, following our updated sustainability roadmap which includes PMI's targets to optimize water usage across our operations. This timeframe is revised annually as part of our risk assessment process and adjusted to reflect any changes arising from additional water interventions that are needed to mitigate these risks.

Comment
PMI plans to assess and invest in similar projects aiming at addressing such risks in the next years.

Identifier
Risk 6

Where in the value chain does the risk driver occur?
Upstream

Risk type & Primary climate-related risk driver

Acute physical	Drought

Primary potential financial impact
Increased direct costs

Climate risk type mapped to traditional financial services industry risk classification
<Not Applicable>

Company-specific description
Physical climate change risks could adversely impact quality and yield of the crops we use, such as tobacco leaf and cloves. Indonesia tobacco leaf suppliers are exposed to physical climate change risks (drought and flooding being most critical). Tobacco growing is strongly influenced by climate change such as changes in temperature and precipitation. Specifically, in the markets where we source from located in the tropics and subtropics that are more vulnerable to climate change, precipitation pattern shifts (too much/ too little rain) could impact PMI's sourcing strategy due to crop losses, quality degradation and disrupted supply chains.

Clove is an essential raw material for PMI to use in our local kretek brands. Indonesia produces over 70% of the world's cloves and PMI purchases 100% of clove supplies from Indonesian farms (purchasing about 18% of the total clove grown in Indonesia), making it a substantial market. Compared to tobacco in 2021, clove made up 25% of total volumes purchased in Indonesia. Clove production is 100% rainfed, making it highly reliant on well distributed rainfall during the growing season. Clove yields fluctuate historically, with harvests varying up to 60% over a 4-year cycle and climate change might increase these fluctuations if dry seasons are prolonged or rain events become more extreme. These fluctuations can cause yield volatility, resulting in crop losses/ decreased yields for suppliers and farmers. Without mitigation measures in place, these fluctuations in availability could threaten PMI´s largest clove source, impactful also because PMI is one of the largest kretek cigarettes producer in Indonesia.

To help mitigate potential impacts of El Niño/ La Niña events or other climatic extremes, the duration of PMI's stock is extended over a number of years to prepare for any variations in yields. In the past, these weather shifts have typically only impacted 1 season of clove production, making stocks sufficient but the magnitude and unpredictability of climate change events can now affect more than 1 crop year in a row. Market price dynamics are very reactive to clove production fluctuations when impacted by El Niño and La Niña events, making planning extremely difficult for suppliers and farmers that become more linked to speculative approaches, thus keeping more than one year of stock becomes a critical action for PMI.

Time horizon
Long-term

Likelihood
Likely

Magnitude of impact
Medium

Are you able to provide a potential financial impact figure?
Yes, an estimated range

Potential financial impact figure (currency)
<Not Applicable>

Potential financial impact figure – minimum (currency)
3400000

Potential financial impact figure – maximum (currency)
12900000

Explanation of financial impact figure
The potential financial impact range is based on a long-term assessment of costs from physical climate change risks related to drought for the specific case of Indonesia. The lower range derives from our comprehensive climate change risk assessment tool combined with the threshold defined for the substantive financial impact, resulting in an 8% estimate (applied either to the sourced volume or spend). The upper range reflects an estimation of 28% based on our modelling projection, that feeds our climate change risk assessment tool (CCRA based on the IPCC and RCP8.5), of the expected impact due to climate change (worst case scenario) for this country. We estimated the relative magnitude between $3.4-12.9 million per year while we foresee this risk in the short to long-term (>6 years) for the Indonesian growers due to supply chain disruptions arising from drought and flood events during the growing season and combining estimated costs due to disruption from crop losses (based on the cost of production, considering potential production fluctuations), quality impacts, and supply chain restrictions (a critical event, for example, can inhibit farmers from accessing their crops during an event). The range that we have calculated is based on the number of days in which activities could not be performed at farm level, therefore constituting a delay/ loss in production.

Cost of response to risk
55000

Description of response and explanation of cost calculation

As part of our tobacco and clove procurement strategy, we require all tobacco and clove suppliers to follow our Good Agricultural Practices (GAP), which provide water related risks mitigation through the adoption of climate smart agriculture practices. We implement globally our Local Risk Assessment (LRA) methodology utilizing granular local data to highlight water-related risks and engaging local stakeholders including tobacco suppliers. PMI utilizes the LRA results to work with farmers to improve agricultural resiliency to flooding and drought like in Indonesia where the results of our 2020 LRA led to planning and implementation of interventions that continued in 2021. Focus trial projects to mitigate the effects of drought impacts on cultivated crops were deployed in clove and tobacco growing areas. Drip irrigation systems have been tested with farmers in clove production to increase resiliency, reduce dependency on rainfall and avoid productivity losses. As a result, the physiology of the crop has been better understood and the water relationship including stress thresholds and optimal water uptake have been systematically tested and more efficient irrigation protocols, for more consistent productivity, derived. To ensure business continuity, PMI has substantial inventories of tobacco leaf which can help mitigate short to medium term impacts (up to 5 years).

The expected timeframe of completion of this response is 2025, following our updated sustainability roadmap which includes PMI's targets to optimize water usage across our supply chain. This timeframe is revised annually as part of our risk assessment process and adjusted to reflect any changes arising from additional water interventions that are needed to mitigate these risks.

The cost of response is based on a $55 thousand budget allocated to environmental projects in 2021 (related to climate change, water security and biodiversity) under the GAP program implementation in Indonesia. The engagement with tobacco and clove suppliers in crop management practices in Indonesia it is included in the cost of response. The expenditures represent approx. 2% of the 2021 global GAP budget.

Comment
Similar investment is expected over the next 10 years considering projected climate change and the potential scale-up of current projects.

C2.4

(C2.4) Have you identified any climate-related opportunities with the potential to have a substantive financial or strategic impact on your business?
Yes

C2.4a

(C2.4a) Provide details of opportunities identified with the potential to have a substantive financial or strategic impact on your business.

Identifier
Opp1

Where in the value chain does the opportunity occur?
Direct operations

Opportunity type
Resilience

Primary climate-related opportunity driver
Participation in renewable energy programs and adoption of energy-efficiency measures

Primary potential financial impact
Reduced direct costs

Company-specific description
By mapping energy consumption profiles of our manufacturing sites worldwide – currently representing 81% of our overall energy consumption - and available technologies, PMI has identified the opportunity to switch to renewables and implement renewable energy (RE) self-generation. The opportunity includes leverage on participation in RE programs and adoption of energy-efficiency measures supported by national policy and incentive schemes. From the mega trends, electrification and through the various stimuli to accelerate the transition to a low carbon economy it is anticipated that policy levers to reduce cost barriers for deployment of renewable technologies will be required. This is likely to include subsidies for energy generation which have already been a feature in many markets and used successfully to support the commercialization of renewable technologies making them cost competitive vs. conventional alternatives. The scale of these subsidies and total cost of energy for renewables is expected to be higher under a 2-degree scenario (2DS). Subsidies for RE self-generation in different countries are factored into our cost-benefit analyses for pertinent projects so that improved return on investment can potentially be delivered. Cost-Benefit analysis and RE assessments have been performed in our facilities located in Italy, Turkey, Lithuania, Ukraine, Serbia, Greece, Indonesia, Romania, Philippines, Portugal, Switzerland, Brazil and Mexico. These analyses proved that not only PMI was able to decarbonize its energy needs by self-generating energy, e.g., through photovoltaic technology, use of sustainable fuel like biomass, but also to drive variability of energy costs and dependency down, and ultimately support our transition toward a low-carbon business model.
PMI could access subsidies for RE generation in its operations in different countries, e.g. in Italy and the Philippines, and any unused energy could be sold back to the grid, creating a new source of revenue for PMI as well as significant savings on energy costs.
This is embedded into our environmental strategy, annual and long range plans to increase the use of RE in our manufacturing sites, increasing either self-generation and/or purchases. In 2021, the self-generation of electricity in our factories increased to 7% (vs. 2% in 2020) from the overall PMI consumption, while the proportion of total energy consumed that is from renewable sources increased to 39% (vs. 34% in 2020).

Time horizon
Long-term

Likelihood
Very likely

Magnitude of impact
Medium-high

Are you able to provide a potential financial impact figure?
Yes, a single figure estimate

Potential financial impact figure (currency)
98000000

Potential financial impact figure – minimum (currency)
<Not Applicable>

Potential financial impact figure – maximum (currency)
<Not Applicable>

Explanation of financial impact figure
The levelized cost of energy (LCOE) for renewable and non-renewable sources was modelled between 2017-2020, drawing from scenario data under 2-degree scenario. This LCOE metric is a useful summary of the lifetime cost of energy incorporating a range of factors (IEA's Fuel input electricity and heat generation (PJ), for biomass, hydro, geothermal, wind, solar PV, solar CSP and hydrogen) associated with the type of generating asset including subsidies. The LCOE has been used to compare the benefit of moving to renewables for energy generation, such as photovoltaic and biomass, with the current operational expenditure on energy at PMI sites assumed to remain constant in business as usual (BAU) scenario. This LCOE is applied to the current PMI operational energy spend to compare the cost of energy of the BAU scenario with a fully renewable uptake over the time horizon considered. The approximate financial impact of this analysis is based on PMI's global operations study results and estimations included in our 2019 Climate Change Risks and Opportunities Assessment. In the assessment PMI focused on the evaluation of physical and transition risks as per recommendation of the Taskforce on Climate-Related Financial Disclosures and the approximate potential financial impact estimated for this opportunity, in a 2DS, was that PMI would have a saving up to $97 million.

We also estimate the overall impact of subsidies for renewable energy generation to our various locations throughout the globe to be over $1 million based on the incentives considered in the renewable projects planned.

Cost to realize opportunity
120000000

Strategy to realize opportunity and explanation of cost calculation
Self-generation of renewable energy (RE) is part of PMI's "carbon neutrality in manufacturing" strategy, which includes the increase in:
- operational efficiency and elimination of losses;
- use of RE;
- self-generation through investment in RE.
We apply technologies to generate RE across our manufacturing sites, such as photovoltaic (PV) panels, biomass boilers, heat pumps, and tri-generation processes (combining cooling, heat, and power). Options to self-generate and/or purchase renewables are evaluated based on analysis of local facilities data, our Energy Management Program and regulatory radar screen. Decisions to mitigate climate-related transition risk due to increased cost to source energy for our operations is taken with the support of an internal shadow carbon price (SCP) ($65 per ton CO2e). PMI's SCP is an internal lever designed to accelerate carbon emissions reduction by ensuring that company's investment decisions reflect all costs, incl. environmental ones. PMI's SCP is integrated into financial evaluation and preparation of business cases that will impact our carbon emissions.

Examples from our manufacturing site in Italy incl. 1) the PV plant operational since 2020, which generated around 3% of total energy used on the site in 2021. 2) the approval of a complex solution space in 2021, incl. the site's electrification plans via a mix of technologies (thermal electrification via heat pumps, electric boiler and additional in-house PV plants) expected to be operational by 2025, delivering 62 GWh annually, improving the overall heat generation efficiency by 6%.

In 2021, self-generation of electricity in our factories increased to 7% (vs. 2% in 2020) from the total PMI consumption while we reached a 39% of total energy consumption (incl. fuels and electricity) from renewable sources. This will contribute to achieve our target to use 100% of green electricity in our factories by 2025. We are on track on this target reaching 81% in 2021.

These projects enabled PMI to increase the share of energy self-generated and to drive variability of energy costs and dependency down.
We estimate a cost of management of $120M (a set annual budget for CAPEX is approved by the PMI's Operations Management Team in a range of $16-20M over a 6-7 years' timeframe), based on previous investments and number of facilities to switch to RE. The cost to realize the opportunity is a range $120M +/- $20M: average cost between $96M ($16M*6 years) and $140M ($20M*7years).

Comment
PMI plans to maintain similar level of investment over the next 10 years

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Identifier
Opp2

Where in the value chain does the opportunity occur?
Upstream

Opportunity type
Resilience

Primary climate-related opportunity driver
Participation in renewable energy programs and adoption of energy-efficiency measures

Primary potential financial impact
Other, please specify (Reduced dependency from fossil fuel and favorably impact farmers profitability and increased their resiliency)

Company-specific description
As cost competitive alternatives to fossil fuels become more readily available, it becomes attractive for tobacco farmers to switch to low carbon energy sources. Farms may become more efficient thanks to new technologies; if PMI continues to invest in programs to improve agricultural practices and encourage uptake of low carbon equipment, farmers' expenditure on fuel and energy inputs will fall. The speed of fall in costs will depend on global trends in fossil fuel prices due to oil markets and implementation of carbon pricing mechanisms. A fall in costs of production should reflect increased revenues for farmers. The reduced dependency of our tobacco supply chain on fossil fuels is an opportunity in the short term for tobacco farmers and supports PMI's GHG emissions reduction targets in medium to long term. A reduction in cost of fuel may have an impact on cost of production for tobacco considering that 96% of our contracted tobacco volumes are mechanized with an average fuel use ranging between 170 and 430 liters/ha of farm.
For PMI's the opportunity lies in enhancing its corporate performance on supply chain environmental impact, CO2 emissions related to mechanization in tobacco would be reduced supporting PMI's SBT target of reducing by 50% its Scope 3 emissions by 2030. PMI has set an internal carbon price for its investment in direct operations (Scopes 1 and 2); a work is underway to assess the applicability of the carbon price to Scope 3 emissions allowing to price the positive externalities generated by a progressive reduction in fossil fuel due to switch to more sustainable and renewable alternatives.
An example is the implementation of PMI's Renewable Curing Fuel Program, which defines a best-practice approach applicable to all flue-cured markets, with a focus on the transition from fossil to low carbon fuels. The program results are globally monitored annually by a third-party, focusing on compliance with our internal standard and fostering continuous improvements. Where the fuel transition results in a switch towards woody biomass, our standard prescribes fuel sustainability and traceability (i.e., from a sustainably managed forest). With the progressive implementation suppliers have effectively transitioned to low carbon fuels for curing in many countries. Focus remains in countries where curing practices are still heavily dependent on fossil fuels (3% of the flue-cured tobacco purchased in 2021 was cured with coal vs. 11% in 2020 from China)

Time horizon
Long-term

Likelihood
Likely

Magnitude of impact
Medium

Are you able to provide a potential financial impact figure?
Yes, an estimated range

Potential financial impact figure (currency)
<Not Applicable>

Potential financial impact figure – minimum (currency)
110000000

Potential financial impact figure – maximum (currency)
225000000

Explanation of financial impact figure
The potential financial impact range represents an opportunity for suppliers and farmers in our tobacco supply chain due to decrease in farmers' costs of production and reflects the estimates of their potential increased revenues.
The benefit sought by PMI is not financial, but rather to build stronger resilience within our supply chain by supporting farmers to switch from fossil to low-emission fuels and it is designed to remain with the farmers as part of the Good Agricultural Practice program.
Through investment, engagement and collaboration in programs to improve agricultural practices, PMI is expecting to ameliorate farmers' conditions and resilience to climate change risks.
The reduced dependency of our tobacco supply chain on fossil fuels is an opportunity in the short term for tobacco farmers and supports PMI's GHG emissions reduction targets in the medium to long term.
The range for the potential financial impact figures has been estimated as follows.
Diesel price was modelled between 2017 and 2030 using the International Energy Agency (IEA) scenario data for projected oil price, and the assumption that the ratio between oil and diesel price will remain constant. According to an internal model, the cost of diesel to farmers as a portion of total cost of production was estimated on a pre-determined cost allocation used for similar agricultural commodities and using a proxy based on the diesel and oil prices from public data sources. The cost output was applied to the mechanization profile of PMI's farmer base (pro-rata based on volumes sourced yearly).
This share was then applied to the current and future forecasted cost of production of tobacco farmers based on annual PMI purchased volumes. It was then assumed that tobacco farmers' cost of production would remain constant in a business-as-usual scenario and increase by the same rate as diesel price under climate change scenarios.
The result after the application of the aforementioned calculation methodology, and factoring farmers' uptake of new technologies, renewables and future forecasted tobacco requirements, was that the potential financial impact of the opportunity for our tobacco suppliers and farmers globally could be in a range of $110 to $225 million per year.
Taking in account our ambition to a carbon-neutral value chain by 2040, all emissions reduction within our Scope 3 may have a potential financial impact in time. It has not been estimated due to the timeframe of the objective.

Cost to realize opportunity
5300000

Strategy to realize opportunity and explanation of cost calculation
Since 2002 PMI implements its Good Agricultural Practices (GAP), a program with mandatory requirements for tobacco suppliers and their farmers, which provides specific guidance on initiatives to mitigate tobacco growing risks and impacts related to climate change.
Strategic initiatives include the Renewable Curing Fuel Program with focus on curing efficiency and switching to low carbon curing fuels, making tobacco suppliers and their farmers more resilient to price increments on fossil fuels. The program started over 10 years ago and is set to deliver on its max. potential by end of 2023 when 100% of our purchased tobacco from China is expected to be cured with biomass (at 89% in 2021) after conversion of former curing barns fueled with coal. The reduced dependency on fossil fuels is an opportunity in the short term for tobacco farmers and supports PMI's GHG emissions reduction targets in the medium to long term. The cost of response of $5.3Mi based on a set yearly budget allocated to initiatives to promote the adoption of improved and innovative practices by farmers in our supply chain. Within GAP, budget is approved on a yearly basis by the sustainable agriculture steering committee and to be accepted it needs to demonstrate clear impacts on the climate footprint of the company in line with the strategy to decrease the use of crop inputs without influencing negatively farm outputs. PMI plans to maintain similar level of investment over the next 10 years. The focus of incentivizing best practice in PMI's supply chain responds to increasing interest for environmental issues from our stakeholders and could enhance PMI's reputation and create corporate value. Moreover, through investment in programs to improve agricultural practices, PMI is expecting to ameliorate farmers' conditions and resilience to climate change risks, strengthening our engagement and collaboration with them. In 2021, gradual switch to renewable sources and improved barn efficiency led to:
- 75% of flue-cured tobacco we purchased was cured using renewable and traceable fuels (mainly in PK, PH, IT, SP, MW, MZ, BR and AR)
- 44% of the fuel was sustainably sourced firewood (31% other biomass)
- flue-curing GHG emissions intensity was 64% lower in 2021 (vs. 2019 baseline)
- reduction of 302,703 tons of CO_2e vs. 2019 baseline

Comment
PMI plans to maintain similar level of investment over the next 10 years.

Identifier
Opp3

Where in the value chain does the opportunity occur?
Upstream

Opportunity type
Resilience

Primary climate-related opportunity driver
Other, please specify (Insetting represents the actions taken by an organization to fight climate change within its own value chain in a manner which generates multiple positive sustainable impacts.)

Primary potential financial impact
Other, please specify (Benefit to operating cost and supply chain value creation.)

Company-specific description
In 2021, PMI advanced its carbon neutrality ambition for Scopes 1 and 2 to 2025 (from 2030). PMI's carbon levy is used to virtually charge selected business units for their respective GHG emissions and establish an internal fund to finance the strategy of the Portfolio of climate investments that focuses on high quality GHG emission reduction projects within PMI's supply chain (insetting projects) as well as purchasing of quality offsets, to compensate for the unavoidable emissions from our direct operations (Scopes 1 and 2), enabling our 2025 carbon neutrality goal. PMI will prioritize the development of insetting projects that are aligned with its Good Agricultural Practices

(GAP) program and that promote sustainable development in line with the company's priorities in the fields of climate, forest conservation and/or reforestation, clean water access, low carbon agriculture, household projects or others. An example of an existing project concept is PMI's work in Mozambique, where farmers and their communities traditionally rely on the use of firewood to sanitize fetched water to drinking water, resulting in GHG emissions and deforestation risk. PMI is contributing to the provision of access to safe and clean water by establishing and rehabilitating boreholes with solar pump technology in its farmers' communities, which contribute to GHG emissions abatement.
Carbon credits generated through insetting projects will be primarily used by PMI to compensate unavoidable Scopes 1 and 2 emissions (e.g., which are not currently possible to reduce due to technical or financial viability).
Insetting projects have a lead time of generally two years to generate carbon credits, in the interim time and to cover offsetting needs, PMI is purchasing carbon offsets on the voluntary carbon market. The volume required exposes PMI to market volatility, particularly in the context of the limited availability of high-quality Nature Based Solutions credits that are the ones preferred by our strategy. The insetting projects represent an opportunity for PMI to be more resilient to market volatility, potentially harvesting benefit in terms of operating cost, as well as to generate co-benefits in the supply chain.
PMI is planning to start implementing insetting projects in 2022 with activity related to baseline definition and technology selection that are already underway.

Time horizon
Long-term

Likelihood
Very likely

Magnitude of impact
Medium-low

Are you able to provide a potential financial impact figure?
Yes, an estimated range

Potential financial impact figure (currency)
<Not Applicable>

Potential financial impact figure – minimum (currency)
2000000

Potential financial impact figure – maximum (currency)
10000000

Explanation of financial impact figure
We aim to reduce our absolute GHG emissions through efficiency improvements and investing in renewable energy sources and use compensation measures as a last resort.
Based on our estimation, for PMI to become carbon neutral for Scopes 1 and 2 by 2025, a consistent amount of credits on an annual basis will be necessary.
For this reason and to provide a pool of projects to use for offsetting of Scopes 1 and 2 in the medium term, a sustainable business strategy was first defined in 2019 leveraging on the implementation of insetting projects.
PMI's 2021 direct emissions accounted for 373,040 tCO2e. Based on our emissions reduction strategy scenarios and simulations, we calculated our potential financial impact on 200,000 tCO2e/year by 2030. PMI is not willing to invest in large scale renewable projects generating millions of credits (e.g., hydro or large size wind farms) due to their reduced relevance our tobacco supply chain environmental strategy and especially in terms of rural community benefits. Attention will be focused more to small-medium scale ecosystem interventions in the field of Voluntary Emission Reduction scheme, with credit prices ranging between $5 and $50 depending on the biodiversity and social benefits embedded in the project outcomes.

To fulfil our carbon neutrality commitment in 2025, we would need to invest between $2 million (200k * $10) and $10 million (200k * $50), taking into account the likelihood of price inflation and considering future volatility of the market with the steadily increasing demand for high quality Nature Based Solutions (NBS) credits. By investing in a portfolio of insetting projects, PMI aims to generate the credits required at a fixed price. The strategy will be based on three main strategic initiatives, NBS, Supply chain and Community projects and Technological climate solutions. Each initiative is different in complexity, execution time and quantity of credits generated per dollar of investment. The objective of the portfolio is to design the investment mix to fulfil the offsetting needs for Scopes 1 and 2 while promoting technological evolution in the field of carbon removal cascading the co-benefits as much as possible on PMI's supply chain and especially its rural communities.
It is important to note that the financial impact mentioned here doesn't take into account all the co-benefits related to reputation, compliance, supply chain resilience to name a few of them.

Cost to realize opportunity
7500000

Strategy to realize opportunity and explanation of cost calculation
To realize this opportunity, in 2021 we have defined an insetting project that would provide access to clean and safe drinking water to rural communities within the tobacco growing areas of Mozambique, where tobacco farmers part of PMI supply chain are located. The project is in line with our water access, sanitation, and hygiene (WASH) program, and will also distribute improved efficiency cookstoves to rural households to further curb the risk of deforestation on the natural forest that surrounds villages and communities. We determined that the best approach would be to create and manage 20 water access sites, building or rehabilitating boreholes with solar pump technology, to determine how well the selected technology works within the local context and its potential to scale up. The project will qualify for certification by the Gold Standard Foundation, thereby generating internationally recognized verified emission reductions, which over time will compensate our residual direct emissions and contributing to achieve PMI's carbon-neutrality target for Scopes 1 and 2 by 2025. According to our feasibility assessment, the installation of 20 boreholes and the distribution of up to 15,000 improved efficiency cookstoves could benefit around 100,000 people and avoid over 1.2 million tons of CO2 emissions over 10 years, providing safe drinking water on a daily basis and with reduced walking distance for the beneficiaries.
The co-benefits of such project(s) are:
- to strengthen our supply-chain not only by providing co-benefits to rural communities but also by being more resilient toward water related issues;
- to align our strategy with international expectation such as the Paris Agreement, by taking ownership of our carbon neutrality ambitions, by being self-sufficient in carbon credit generated and cost-efficient;
- to demonstrate leadership by internalizing the cost of externality due to climate change.

The cost provided is an estimation for a set budget (i.e., we set a single investment amount into the program and it is not possible to provide a breakdown) to be allocated to the initiative, as the project is still under development and not finalized yet. We estimate the cost to be approx. $7.5 million which will include the cost of building the boreholes (geological survey, pilot drilling, preparation work and construction), the solar pump technology, the cookstoves, the management, monitoring and certification fees.

Comment
PMI aims to continue assessing, and where feasible, investing in opportunities through insetting projects in its value chain within the next 10 years. Our insetting projects follow a specific strategy based on value generation where we collect data and measure the impact of the activities related to carbon sequestration in three areas: impact on natural, human and social capital. In our project evaluation process, benefits generated by insetting activities are accounted and monetized in societal benefit as well as using the social return on investment (SROI) index calculated through the ratio between societal value ($)/Input value ($). We commit to develop insetting projects and more projects in general that remove, sequester and store carbon only with positive SROI. In the case of the insetting project in Mozambique, the calculated SROI is positive and

the main impact pathways generated with the project are direct health benefits for project stakeholders that led to positive income effects, education benefits and avoided deforestation for the forests in the project area.

Identifier
Opp4

Where in the value chain does the opportunity occur?
Direct operations

Opportunity type
Products and services

Primary climate-related opportunity driver
Development and/or expansion of low emission goods and services

Primary potential financial impact
Reduced direct costs

Company-specific description
PMI has a history of successful packaging innovation, and packaging is an important aspect of sustainable design (i.e.: eco-design). With respect to our smoke-free products, our 2025 eco-design and circularity ambitions related to packaging, aim reducing the carbon footprint of smoke-free products in line with our science-based targets.
In packaging, more than 90% of our materials were paper and cardboard in 2021. The primary function of packaging is to contain and protect products from the point of manufacture to the retail store or end user, as well as to provide product information.
We are addressing our packaging strategy with a multipronged approach, including awareness-raising training for our Pack developers, ongoing research into alternatives to plastic based packaging, and improved design of packaging.
Governance of eco-design and circularity is guided by our design and development teams and is fully embedded within our innovation process, including regular checkpoints with senior management. We are committed to evaluating sustainability characteristics and making design choices that will continually enhance the performance of all our products and packaging. Life cycle assessment (LCA) and/or other relevant environmental assessments are performed prior to launch of any new product and results presented in internal decision-making forums, in accordance with our sustainable design governance programs.
Research are constantly performed on packaging design to identify new technologies and materials that could enhance the overall sustainability of our smoke-free product portfolio as well as conventional portfolio. Internal cross-functional teams are already hard at work establishing these innovation pipelines.
As an example, we are actively working in developing an innovative packaging design solution for our smoke free products addressing material consumption by lowering the weight and the number of secondary packaging components in use, through packaging material substitution. This initiative estimates a potential magnitude of packaging components reduction in weight of 55% (about 6.5grams less per pack). This include a reduction in weight of plastic of 56% (580 tons of plastic less) by the time the solution is fully implemented. As a return, by lowering the total consumption of secondary packaging requirements through complete redesign, we shall reduce the CO2 footprint of our packaging for smoke free products by approx. 4% (320 tons of CO2e).

Time horizon
Medium-term

Likelihood
About as likely as not

Magnitude of impact
Medium-low

Are you able to provide a potential financial impact figure?
Yes, a single figure estimate

Potential financial impact figure (currency)
8900000

Potential financial impact figure – minimum (currency)
<Not Applicable>

Potential financial impact figure – maximum (currency)
<Not Applicable>

Explanation of financial impact figure
As we are reducing the total amount of packaging requirements to produce the same amount of smoke free products, we are generating financial savings. The yearly potential financial impact of the opportunity relies on the SVC (Standard Variable Cost in $ per thousand of smoke-free product units) variation between current solution and innovation applied to the market contemplated number of smoke free product units. Based on volumetric price of materials involved in both new and current solutions factored by the yearly consumption of smoke-free products Stock Keeping Unit (SKU) selected, we modelled expected savings resulting in a magnitude of $8.9 million. [(current material price per Kg * current material quantity per SKU – new material price per Kg * new material quantity per SKU) * SKU volume = savings i.e.: $8.9 million.
Formula example with generic numbers: [($10/Kg*100Kg) – ($9/Kg*80Kg) * 100 000 SKU = $28,000,000]

Cost to realize opportunity
7000000

Strategy to realize opportunity and explanation of cost calculation
Following Management validation of the proposed innovation solution and associated business case that is expected within the next 6 months, our engineering, procurement and manufacturing solutions teams, as well as our suppliers of direct material and packing machinery, will collaborate to realize this project following our standard stage gate process. PMI will implement the standard Industrialization Stage Gate process which includes: detailed specifications creation, involvement of supply chain partners, Capex activation and machine park upgrade, manufacturing and quality deployment process through quality and machinability tests and last but not least validation protocols.
When it comes to Capex, investigations were conducted by our Engineering Solutions teams in collaboration with OEMs [Original Equipment Manufacturers] which packing machines are used for the production of our smoke-free products to identify the magnitude of machine modification required to implement this packaging change ensuring the highest level of quality, runability and machine efficiency.
The results of these costs investigations at machine level in the ideation stage is estimated at an average of $100 thousand per machine and is then multiplied by the number of respective machines in use [70] in our affiliates for the packing process of our smoke-free products which would be part of the project (i.e.: at the moment estimated 70 machines * $100 thousand in average per machine resulting in about $7 million).

Through all these preparation and machinery upgrade actions, we shall then be in the position to deploy the new innovative secondary packaging solution, bringing estimated packaging components reduction in weight of 55%, reduction of plastic packaging weight of 56%, cost optimization of $8.9 million, and CO2 emissions reduction by approx. 320 tons of CO2e.

To date a pilot market is expected to be completed by end of 2022 to validate the solution in real conditions, and the project deployment is expected to be completed within 2 years and be fully operational by end 2024.

Comment
PMI strives to minimize packaging materials and improve their circularity by increasing their recyclability and promoting the use of materials made from renewable resources.

Identifier
Opp5

Where in the value chain does the opportunity occur?
Direct operations

Opportunity type
Resource efficiency

Primary climate-related opportunity driver
Use of more efficient production and distribution processes

Primary potential financial impact
Reduced direct costs

Company-specific description
Driving energy efficiency is core to our strategy. Transition toward a low-carbon business model is a priority within PMI strategy to achieve our carbon neutrality objective and deliver financial productivities.
Our activities in this area center on our Drive for Zero (D4Ø) global program, which aims to eliminate economic losses caused by inefficient energy use. Under the program, we look for industrial and manufacturing solutions such as heat recovery and manufacturing-process optimization. We also promote behavioral change through our Zero Loss Mindset program.

To support our D4Ø program, an Energy Saving Initiatives (ESIs) program has been started in 2019, triggering more than 500 projects worldwide including among many others LED lighting, HVAC upgrade, chilled water optimization and heat recovery projects.

In line with the implementation of our internal carbon pricing approach, the application of an internal shadow carbon price improves the ROI of the project, making a stronger business case for the investment, facilitating the approval when presented to senior management.

The opportunity of embracing new technologies and discontinue obsolete ones present several benefits, among which but not limited to:
- improved financial productivity in the medium-long term, even more considering the increasing energy requirements due to the ramp up of production of our smoke-free products which are more energy intensive than conventional products;
- enhanced opportunity in trading schemes.

New technologies are fast evolving and requires thorough and continuous monitoring to seize opportunities.
We recognize that more energy is required to produce heated tobacco units compared with conventional cigarettes, with a consequent increase in greenhouse gas emissions. We are seeking to reduce this impact through these appropriate investments.

Time horizon
Medium-term

Likelihood
Very likely

Magnitude of impact
Medium-high

Are you able to provide a potential financial impact figure?
Yes, an estimated range

Potential financial impact figure (currency)
<Not Applicable>

Potential financial impact figure – minimum (currency)
21000000

Potential financial impact figure – maximum (currency)
25000000

Explanation of financial impact figure
The PMI's energy dashboard tool includes more than 500 energy saving projects with the potential to be implemented in our factories.
The financial impact of such opportunity considers the financial savings of the projects' implementation calculated in the PMI's energy dashboard tool, which has been estimated between $21 million and $25 million as aggregated total estimated figures. The enhanced productivity in our manufacturing sites triggers saving related to energy and water annual consumption costs.
In order to evaluate relevant financial saving as well as capital and operational expenditures, prior project implementation, we take under consideration data input and assumption such as costs of energy in the countries where we operate and expected reduction in energy consumption, estimation of technical performance for equipment and/or intervention and cost of technologies and/or intervention.
To calculate the financial impact, we have used the total quantity of expected energy saved factored with the average cost of energy relevant to the various jurisdictions where PMI operates (ΣGJ saved x average cost $/GJ). At 2026 we expect to save approx. 1.1 TWh from these initiatives.

The potential of trading surplus of carbon credits allocated to PMI in Cap & Trade schemes (such as EU ETS for example) has not been quantified due to the upcoming changes with phase IV of the EU-ETS and has not been accounted for in that case.
The financial impact range is provided by the sum of the lower brackets estimates ($21M) and the higher ones ($25M).

Cost to realize opportunity
55000000

Strategy to realize opportunity and explanation of cost calculation
Driving energy efficiency is core to our carbon neutrality strategy in manufacturing and to deliver a step-change in financial performance to PMI.
Under D4Ø program, and the Energy Saving Initiatives (ESIs) program, each PMI factory have been reviewed and prioritized.

The ESIs program started in 2019 and includes 3 waves:
- Wave 1 focuses on the top 15 factories with the highest energy footprint and ESIs with return on investments (ROI) below 3 years to leverage on quick win projects;
- Wave 2 covers all factories and ESIs with ROI below 4 years and include every projects subject to save energy within our manufacturing sites portfolio;
- Wave 3 looks at energy savings and energy efficiency technologies with a longer ROI (generally between 3 and 8 years), e.g., process heat recovery, and disruptive technology which will further drive our factory toward carbon neutrality.
The ESIs wave 1 and 2 program includes more than 500 projects globally, e.g., LED lighting, HVAC upgrade, chilled water optimization and heat recovery. The cost to realize this opportunity is based on the deployment forecast of the 3 waves for the next 3 to 4 years and contribute to deliver substantial energy saving equivalent to more than 52,000 t/CO2e reduction.
The $55 million cost to realize the opportunity covers the full D4Ø program including ESIs program for all the PMI's manufacturing sites globally, and behavioral change trainings seeking to empower every worker to look for losses and recommend and implement solutions. The cost is a set budget for the sum of all projects, and it is not possible to provide a breakdown by initiative. The cost is revised periodically by Operations management team due to the routinely assessment of several parameters such as specification changes, prioritization, re-estimation based on technology evolution and fuel prices.
We applied the PMI's shadow carbon price ($65 per ton CO2e) to assess and prioritized 8 projects to drive the implementation of technologies with the higher impact in CO2 emissions reduction.
The ESIs program is expected to be implemented by 2026. In 2021, the program triggered more than 140 projects worldwide, ranging from chilled water optimization, heat-recovery projects, and LED lighting to heating, ventilation, and air conditioning system upgrades. Overall, our efficiency initiatives and behavioral changes helped drive around 12% reduction in carbon emissions across our manufacturing facilities in 2021 versus 2020.

Comment
We recognize that more energy is required to produce heated tobacco units compared with cigarettes, with a consequent increase in greenhouse gas emissions. We are seeking to reduce this impact through these appropriate investments.
Our initiatives don't apply solely to our manufacturing sites, in our tobacco supply chain we focus on three areas: reducing fuel consumption by improving curing-barn efficiency, promoting the switch from fossil fuels to biomass fuels, and ensuring sustainable and traceable firewood (leading to an absolute reduction in 2021 of 302,714 tons of CO2e versus our 2019 baseline); in this opportunity here we only accounted the impact in our direct operations.

Identifier
Opp6

Where in the value chain does the opportunity occur?
Direct operations

Opportunity type
Resource efficiency

Primary climate-related opportunity driver
Use of more efficient modes of transport

Primary potential financial impact
Reduced indirect (operating) costs

Company-specific description
Our fleet of nearly 22,000 vehicles registered over 380 million kilometers driven in 2021. Most (80 %) of our fleet vehicles are working tool vehicles, used primarily to visit point-of-sale locations and distribute our products, with the rest being benefit cars. Our fleet emissions accounted for about 27% of our direct (Scope 1) GHG emissions in 2019.
Following the development of our carbon neutrality strategy for our fleet in 2020 and the strengthening of our organizational capabilities with the setup of our fleet Centre of Expertise (CoE), we instituted a new Global Vehicle Fleet policy early in 2021. This policy frames our fleet strategy and moves us to a more centralized operating model to help ensure that every PMI affiliate contributes to our global goal of becoming carbon neutral (scope 1+2) by 2025.

To reduce carbon emissions in our fleet, we invest in sustainable powertrains and effective driving to optimize energy consumption while improving operational efficiency. During 2021, we selected more environmentally friendly powertrains e.g., as hybrid and electric vehicles to guide the renewal of our fleet. We anticipate these vehicles will emit 40% less carbon emissions than the models they replaced. The opportunity considered PMI's internal carbon price (ICP) of $65/ton of CO2 emitted as one of the factors to compare the full cost of ownership impact and the potential savings of a hybrid vehicle vs. an internal combustion engine (ICE).

In line with the above global PMI strategy, Philip Morris Taiwan together with the Fleet CoE evaluated the switch of Working Tool Cars (WTC) from ICE to Hybrid Electric Vehicles (HEV). The assessment conclusion justified the switch of the WTC fleet in Taiwan to full hybrid starting from 2021. We are applying the same approach to PMI's global fleet aiming at a progressive conversion to lesser polluting and better cost performing vehicles not only for WTC but also for benefit cars with a target of having 30% of our WTC fleet as hybrid or even less polluting drivetrains by 2024. The benefit will be twofold, i) a positive impact on overall emissions for Scope 1 for fleet that will follow the reduction curve defined by lower emissions linked to hybrid technology, ii) increased savings on operational costs due to reduced fuel consumption and in many geographies also tax liabilities that lower emission vehicles are subject to.

Time horizon
Medium-term

Likelihood
Very likely

Magnitude of impact
Medium

Are you able to provide a potential financial impact figure?
Yes, an estimated range

Potential financial impact figure (currency)
<Not Applicable>

Potential financial impact figure – minimum (currency)
500000

Potential financial impact figure – maximum (currency)
1000000

Explanation of financial impact figure
For the Taiwan experience two gasoline powered car options have been compared with a full hybrid alternative. The hybrid powertrain was chosen for a compact model that was compared with two lower segment subcompact alternatives. The hybrid resulted in 30% and 34% less CO2 emission on a yearly basis with an equivalent decrease in fuel consumption compared to the gasoline options. For the calculation of the cost saving from switching drivetrain we added the cost avoidance of choosing a lower emission car by multiplying, as a cost component for investment decisions, the additional tons of CO2 emission of the gasoline car by the internal carbon price PMI has set;

PMI ICP is $65 per ton of CO2e avoided. Considering the better mileage of the hybrid car and adding the impact of the internal carbon price to the more emitting gasoline cars, overall, each hybrid car guarantees a saving in total cost of ownership per year quantified in approx. $150. The work in Taiwan included a relatively small fleet of 51 cars which brought to PMI over $7 thousand in cost saving and over 50 tons CO2 of reduced emissions to be accounted for in Scope 1, we consider this to be a proxy for the lower estimate for our cost saving estimation on the total PMI car fleet in 2024 resulting in approx. $500 thousand. With a conservative approach, we factored the high number of markets included in our fleet conversion strategy, the related volatilities in global fuel cost trends and market availability of vehicles, and accordingly we applied a proxy of 200% to the lower range figure to estimate the upper range of the potential financial impact in the same timeframe. Based on this approach we estimate a saving of approx. $1 million. As the conversion of our fleet progresses, we will be able to collect more data to further precise the savings resulting from the program implementation.

Cost to realize opportunity
0

Strategy to realize opportunity and explanation of cost calculation
Tackling WTC emissions is a tangible action and demonstration of sustainability leadership, as well as an important driver of behavioral change since cars are part of the daily routine at most of the markets where PMI operates.

Our strategy contains a three-step approach to improving our CO2 performance with regards to our fleet:
1. switch to use of sustainable powertrains (xEVs) and minimize use of fossil fuels
2. optimize fuel consumption and fuel efficiency via eco driving training and telematics
3. offset remaining unavoidable GHG emissions

Switching to hybrid and electric cars will bring a benefit in terms of CO2 emissions and cost reduction for the ownership of the vehicles. As illustrated in the Taiwan case, the cost calculation was performed by analyzing the models considering different parameters such as mileage driven, market fuel price and leasing rate. While mileage driven & market fuel price remained constant for the 3 models, the leasing rate varied as the monthly leasing rate for both actual models driven, and the new petrol model are cheaper than the one for the hybrid model.

Significant progress was achieved in making accessible alternative powertrains, like hybrid, to users at a cost competitive structure compared to petrol/diesel engines; we estimate no cost impact in converting our fleet to hybrid. The residual value of hybrid cars in several markets is already higher than that of equivalent gasoline cars making the case of the former more convenient. The conversion will be gradual for two reasons: i) residual use time we will have to complete for petrol vehicles contracted after 2017; ii) unavailability of hybrid vehicles respecting all PMI's eligibility criteria as WTC in some markets. Incorporation of our ICP, $65 per ton of CO2e, to the calculation of cost saving opportunity will provide further support to the approval of the policy for conversion. The roadmap defined has the aggressive target of having at least 30% (10% in 2021) of the fleet converted to hybrid or even less polluting drivetrains by 2024.

Comment
We leverage eco-training and telematics to improve driver behavior and further engage employees in our sustainability agenda. By the end of 2021, one third of company drivers were enrolled in the first year of our fleet safety e-learning program, which incorporates eco-driving modules. We expect all drivers to enroll by the end of 2023.

C3. Business Strategy

C3.1

(C3.1) Does your organization's strategy include a transition plan that aligns with a 1.5°C world?

Row 1

Transition plan
Yes, we have a transition plan which aligns with a 1.5°C world

Publicly available transition plan
Yes

Mechanism by which feedback is collected from shareholders on your transition plan
We do not have a feedback mechanism in place, but we plan to introduce one within the next two years

Description of feedback mechanism
<Not Applicable>

Frequency of feedback collection
<Not Applicable>

Attach any relevant documents which detail your transition plan (optional)
pmi_lctp_211026.pdf

Explain why your organization does not have a transition plan that aligns with a 1.5°C world and any plans to develop one in the future
<Not Applicable>

Explain why climate-related risks and opportunities have not influenced your strategy
<Not Applicable>

C3.2

(C3.2) Does your organization use climate-related scenario analysis to inform its strategy?

	Use of climate-related scenario analysis to inform strategy	Primary reason why your organization does not use climate-related scenario analysis to inform its strategy	Explain why your organization does not use climate-related scenario analysis to inform its strategy and any plans to use it in the future
Row 1	Yes, qualitative and quantitative	<Not Applicable>	<Not Applicable>

C3.2a

(C3.2a) Provide details of your organization's use of climate-related scenario analysis.

Climate-related scenario	Scenario analysis coverage	Temperature alignment of scenario	Parameters, assumptions, analytical choices
Physical climate scenarios: RCP 8.5	Company-wide	<Not Applicable>	The 2015 CCRA focused on evaluation of future climate change impacts to an updated list of 85 key PMI facilities and supply chain nodes (ports, tobacco growing areas and direct materials) to reflect PMI's structure. The time horizon considered projections for the 2030 timeframe under 'high emissions' scenario RCP8.5 to prepare PMI for medium-long term major physical CCRO and it defines the timeframe for assessing opportunities for new tobacco growing areas. Parameters and assumptions for each assessment were defined based on potential impact in specific business areas, incl. impacted areas and related crop losses for the tobacco production, downtime for facilities such as manufacturing sites, and other parameters. Assumptions were based on the scenario chosen and variability of different climate-related events in geographies PMI operates. Outcomes of the CCRA, especially potential exposure of tobacco farmers and PMI's factories to water stress, supported several decisions e.g. 1) to invest in factories where local risks have been identified, e.g., droughts in AR, BR, ID and PH; 2) to implement Alliance for Water Stewardship standard in our factories with the objective to certify all of them by 2025 (16 sites certified by 2021), aiming to further mitigate risks and enhance stakeholders' engagement in catchment area; 3) development of a local water risk assessment tool for our tobacco growing areas to better understand local risks and drive mitigation actions, as part of our Good Agricultural Practice program to support our volumetric water benefit target of 10Mio m3 at 2030. Implementation of above processes and findings enabled our strategies to prioritize initiatives in collaboration with our tobacco suppliers that had not yet in place a mitigation strategy aligned with our scenario analysis, e.g., practices to reduce water consumption at farm level in Turkey and Italy. The application of the strategy led to less stress sensitive tobacco growing areas and more stability in PMI's tobacco sourcing strategy. PMI 2020 Water Risk Assessment projected water stress in company's global sites (i.e., factories, warehouses and offices) to 2030 and 2040 under optimistic (SSP2-RCP 4.5), BAU (SSP2 – RCP 8.5) and pessimistic (SSP3 – RCP 8.5) scenarios, fully aligned with the information provided by the World Resources Institute (WRI) platform Aqueduct. Results of this water risk assessment inform our Integrated Report 2021 as well as our CDP Water Security disclosure.
Transition scenarios: IEA 2DS	Company-wide	<Not Applicable>	PMI 2019 Climate Risk & Opportunity assessment (CCRO) estimated transition risks under two IEA scenarios to 2030: "RS" and "2DS". The Reference Scenario (RS) provides a baseline scenario that considers existing energy- and climate-related commitments by countries, including Nationally Determined Contributions, which are expected to lead to an average global temperature increase of 2.7-3.3°C. The RS reflect the world's 2017 ambitions — is not consistent with achieving global climate mitigation objectives but would still represent a significant shift from a historical "business as usual" approach. The assumptions of the RS scenario are aligned to the IEA CPS (Current Policy Scenario). The 2 Degree Scenario (2DS) sets out a rapid decarbonization pathway in line with the Paris Agreement target of limiting the global warming below 2°C. The CCRO mapped 149 risks and opportunities, clustered according to their certainty and severity into: proactive, reactive, non-material, watch & quick wins. For 18 CCROs we estimated the financial value-at-stake under the 2DS and RS scenarios vs. the BAU. The 2DS scenario informed PMI's business strategy by serving as a benchmark to set up our SBTs (time horizon 10 years, by 2030). The areas considered in the analysis included Sustainability and environmental focused teams, Risk & Insured losses, External Affairs, Science & Innovation. As part of the parameters and assumptions we classified the risks and opportunities into four categories: 1) revenue drivers (e.g., production capacity), 2) cost drivers (e.g., operating costs); 3) asset efficiency (e.g., return on investment); 4) reputation (e.g., stakeholder relations). Outcomes of the CCRO, especially potential exposure of tobacco farmers and PMI's factories to transition risks such as direct costs exposure to energy costs and carbon pricing, supported several decisions such as 1) the development and implementation of an internal carbon pricing mechanism applying a Shadow Carbon Price (SCP) as a lever to accelerate carbon emissions reduction to address transition risks in our direct operations 10 years in advance for a forward-looking approach; 2) implementing strategic initiatives in our tobacco supply chain incl. improving efficiency and switching to low-carbon energies under PMI's Good Agricultural Practices program, making our tobacco supply chain and PMI more resilient to price increments on diesel under the IEA scenario data for projected oil price by 2030.

C3.2b

(C3.2b) Provide details of the focal questions your organization seeks to address by using climate-related scenario analysis, and summarize the results with respect to these questions.

Row 1

Focal questions

A forward-looking approach is widely used for assessing potential climate-related risks and opportunities (R&O) under different future scenarios. However, since R&O are context-specific issues and differ across temporal and spatial scales, it brings uncertainty in the risk assessment process especially for large corporations like PMI with complex and global value chain. The use of climate scenarios allowed us to account for the uncertainties arising from potential decarbonization pathways and global warming trends, socioeconomic growth and new policies, market trends and society behaviors, among others. TCFD recommends that the range of scenarios should reflect the underlying drivers and assumption relevant for the risks a company will face in site and time-specific contexts. The use of climate-related scenarios helped us to map our exposure to physical and transition risks to 2030 (and 2040 for water stress) by answering focal questions, under diverse mitigation pathways aligned with i) the Paris Agreement goal (2DS – below 2°C) with more stringent decarbonization measures in place an likely transition risks; ii) a reference policy scenario (RS) based on the pathway outlined in RCP 4.5 and including policies aligned to the achievement of NDCs (IEA CPS); a worst-case high-emission scenario, with likely high physical risks and impacts (RCP 8.5).

Which are the most vulnerable components of PMI Operation to climate change? Which will be the company's exposure to physical and transition risks under different scenarios vs. the business as usual?

In particular, we tried to understand:

Which are the potential physical impacts of weather-related extremes on the company capacity to operate? Which are PMI facilities and logistics at risk?

Are the PMI tobacco supply regions at risk due to climate change impacts? Which are the expected losses in tobacco crop yields across the diverse supply regions? Which are the vulnerable hotspots calling for adaptation measures?

Which are the transition R&O in PMI Operations? Which are the priority risks with the highest certainty and materiality, calling for a proactive response?

Which are the financial impacts (positive and negative) of prioritized transition risks?

Is PMI already managing these risks by reducing the vulnerability of the systems at stake?

Results of the climate-related scenario analysis with respect to the focal questions

Hotspots of physical risk – Results in RCP 8.5 (and 4.5 for water stress)

• MANUFACTURING/LOGISTICS: Soaring risks of cyclone instances in our facilities in Philippines and South Korea; ii) severe risks of drought in our facilities in Kazakhstan and Pakistan; iii) relevant increase in flood risk in our Eastern EU facilities; highest risk in our Philippines' sites; iv) risk of cyclones in ports of the Philippines, Japan, South Korea, USA and Mozambique; v) 7 of our factories and 14 warehouses at mid- to high-risk of water stress. This could lead to increased downtime and asset damages in all previously identified hotspots, even though by 2030 these potential changes vs. BAU are often not significant.

• LEAF: i) Significant increase in cyclone risk in USA tobacco growing areas (TGA); highest losses in tobacco yields in the Philippines; ii) significant increase in drought risks (ca 30%) in TGAs in Argentina, Brazil and Asia; highest yield losses in Greece, Colombia and Pakistan; iii) the highest yield losses due to floods in Philippines and Indonesia.

Hotspots of transition risks – Results in 2DS and RS

• Preliminary list of 149 transition risks for PMI Operations. Short list of 18 proactive risks prioritized according to the highest materiality and certainty criteria and classified as follow:

o LEAF:

Energy use: Risks are associated with fossil fuel requirements in agriculture and curing, resulting in exposure to carbon pricing and increased energy costs;

Biomass for curing: availability and price of biomass and wood affected by stringent regulations on land use;

o LOGISTICS: Regulation of transportation - logistic network is exposed to differential development of regulation by mode - e.g., road at a national level and maritime at an international level – leading to upward cost pressures due to the current reliance on fossil fuels;

o MANUFACTURING: PMI faces direct cost exposure to carbon pricing in relation to energy use. Under 2DS scenario the carbon price and global coverage of this type of regulation, are both anticipated to increase;

o Land pressure: increasing land competition between biofuels, reforestation and food production. This competition is anticipated to put an upward pressure on the market price for tobacco.

• The value at stake doubles in the 2DS vs. the RS, largely driven by risks in leaf-curing due to reduced availability and high price of biomass due to stringent regulations on land use, and, to a lesser extent, to the reliance on fossil fuels and land pressure.

• Many of the substantive risks identified, particularly in Leaf, are currently being managed through the current sustainability strategy: GAP initiatives with farmers, Water Stewardship program, Zero Deforestation Manifesto, 1,5°C aligned and net-zero targets validated by SBTi. Current and planned investments in insetting projects will ensure long-term reliable supply of carbon credits, minimizing our exposure to carbon price volatility in the open market.

C3.3

(C3.3) Describe where and how climate-related risks and opportunities have influenced your strategy.

	Have climate-related risks and opportunities influenced your strategy in this area?	Description of influence
Products and services	Yes	For PMI, sustainability means creating long term value while minimizing the negative externalities associated with our products, e.g., through Lifecycle Assessments (LCAs), new product and packaging design. Following a more in-depth CCRO assessment aligned with the TCFD recommendations, we evaluated climate risks and opportunities in relation to our Products & Services, such as shifts in supply & demand and downstream market risks associated with shifting consumer demands for lower-carbon products. In 2021 PMI carried out 7 surveys with over 2000 users in 4 key Smoke Free Product (SFP) markets. Results provided valuable insights on our consumers' view and evaluation, with over 90% expressing positive perceptions of our company's efforts in sustainability as a progressive and innovative brand, as well as appreciation for our circular pillar flagship Sustainability programs. This feedback enabled PMI to design mechanics, assets and campaigns for these programs and, thus, integrate them in the design of our SFP roadmap and branding campaign. Climate-change influences setting of sustainability targets for our products and services at short and medium term. To control environmental and social impacts across the life cycle of our SFP, we set our 2025 eco-design and circularity ambitions, which extend to electronic devices, accessories, consumables, and packaging, incl.: - Provide access to collection and recovery for device and its consumables to all IQOS users - Continue to reduce the carbon footprint of our SFP in line with our science-based targets - Achieve eco-certification for all our PMI smoke-free electronic devices introduced on the market as of end of 2025 Potential benefits incl. energy savings, reduced use of natural resources, waste reduction, and a longer product lifespan. In 2021 we continued to invest on LCAs focusing e.g., to change the battery technology for our IQOS charging units. Our new battery chemistry offers the same performance with a reduced carbon footprint vs. our previous version. This continued to be deployed in the devices sold in 2021 for IQOS 2.4+ and IQOS 3 DUO chargers, resulting in 9% reduction in the product's CO_2 footprint.
Supply chain and/or value chain	Yes	Physical climate change risks could affect, with a medium impact, our own operations and those of our suppliers globally. Changes in precipitation patterns and extreme variability in weather patterns could affect the yield, quality and availability of key crops, such as tobacco leaves and cloves, changing our buying patterns and increasing operational costs. Increased drought/flooding could disturb the tobacco leaf life cycle stages in several countries from where we sourced from in 2021, driving strategy interventions in impacted areas. Flooding may require pumping of excess water; similarly, extreme droughts may require long-term irrigation, increasing energy consumption and production costs. The financial implications of these risks vary depending on the impacted asset. E.g., in our tobacco growing areas in Brazil and Philippines they could cause interruptions in our supply chain with a financial impact ranging from $4 million to $15.8 million. To prevent these impacts from materializing, PMI has adapted its management strategy at the short-medium term. We take into consideration those risks in the strategic decision and annual planning of our tobacco leaf inventories which can help mitigate short to medium term impacts. To support addressing these risks PMI embedded environmental sustainability considerations in Good Agricultural Practices (GAP) and Responsible Sourcing Principles (RSP) since 2002 and 2017 and required suppliers to comply with them. PMI actively engages with its suppliers, and we plan to embed the elements of our carbon neutrality strategy in the programs with our suppliers as we move to the achievements of PMI's targets for 2030. In the strategic decision and annual planning of our tobacco leaf inventories we include consideration on the impact that GAP initiatives had since its implementation to mitigate those risks and its increasing influence over time in the short to medium term. E.g., PMI has invested around $530k in 2021 to support farmers in Brazil, the Philippines and in Indonesia with more efficient technologies (e.g., drip irrigation) contributing to climate change mitigation efforts. In the long-term our business strategy focuses on physical adaptation and long-term emissions reduction in accordance with our approved Science-Based Targets, based on 1.5°C pathway, to reduce our value chain absolute carbon footprint.
Investment in R&D	Yes	Increasing climate change risks consumers' awareness can generate fluctuations in supply & demand and create downstream market risks and opportunities associated with shifting consumer demands for lower-carbon products. In 2021 PMI carried out 7 surveys with over 2000 users in 4 key SFP markets. Results provided valuable insights on our consumers' view and evaluation, with over 90% expressing positive perceptions of our company's efforts in sustainability as a progressive and innovative brand, as well as appreciation for our circular pillar flagship Sustainability programs. This feedback enabled PMI to design mechanics, assets and campaigns for these programs and, thus, integrate them in the design of our SFP roadmap and branding campaign. Product eco-design and circularity is now integral part of our R&D work and embedded in our long-term strategy to support our smoke-free future vision. With respect to our smoke-free products, in 2020 we set our 2025 eco-design and circularity ambitions, which extend to electronic devices, accessories, consumables, and packaging. In the area of product innovation, we aim to have all our new electronic devices commercialized as of end 2025 certified to validated standards for eco-design. We are also working toward the inclusion of recycled content in all devices by 2025. In our operations, eco-design principles inform how we use life-cycle analysis (LCA) to assess the comparative carbon footprint of our products, from tobacco sourcing to end-of-life impacts. We have analyzed IQOS devices, heated tobacco units, and packaging. We are working to close the gap between combustible and smoke-free products, in terms of carbon emissions intensity, through intensive R&D in improved manufacturing processes, extending the usable life of our electronic devices, and decreasing the total CO_2 footprint through innovative material selection guided by the application of LCAs and eco-design practices. Over the past three years, we have reduced the overall CO_2 impact of our smoke-free products through improvements in manufacturing processes and in our tobacco supply chain.
Operations	Yes	Beyond its human repercussions, climate change threatens business continuity, especially where businesses involve agricultural supply chains. For PMI, raw material costs such as tobacco leaf and cloves may rise, with consumers and our employees becoming increasingly sensitized to environmental impact of corporate actions. Upfront investments with longer-term returns are required as consequences of climate risk could expose investors to changes in corporate stock value. PMI's efforts to reduce GHG, e.g., through increased energy efficiency, could alleviate potential costs and create competitive advantage by meeting or exceeding consumers , employees, and other stakeholders expectations. In 2021, our assessment results on current updated societal expectations, made us confirm our ambitious targets to guide on decarbonization: - Achievement of carbon neutrality of PMI's direct operations (Scopes 1and 2) anticipated to 2025 (from 2030); - Achievement of net zero in PMI's value chain (Scopes 1, 2 and 3) by 2040 - a reduction in absolute CO_2 emissions consistent with SBTi for a 1.5-degree submitted and validated in 2020. Our climate change strategy has a key role in the medium and long term to enable efficiencies in our operations, to keep us ahead of our competitors, increase our resilience and to fulfil our reduction targets for a better strategic position when customers/investors assess our performance. Our business strategy focuses on physical adaptation and long-term emissions reduction including: - long-term sourcing strategies integrating CCRO considerations - customer and supplier sustainability strategies aligned with ours to ensure support to our objectives. Our strategy and decisions are influenced by understanding and adapting to potential future climate change issues and by minimizing our environmental impact. We integrate climate related physical and transition risks and opportunities related to regulation, reputation and market by implementing carbon emission reduction projects with longer payback period in our facilities, sourcing voluntary green electricity to decrease our dependence from fossil fuels and reduce our carbon footprint, among others. One example is the decision to implement energy saving and CO_2 reduction projects in our facilities delivering 8.5% reduction on Scope 1 and 2 emissions of our manufacturing sites between 2020 and 2021.

C3.4

(C3.4) Describe where and how climate-related risks and opportunities have influenced your financial planning.

	Financial planning elements that have been influenced	Description of influence
Row 1	Direct costs Indirect costs Capital expenditures Capital allocation Assets	A clear international trend towards increasing and stricter climate-related regulations exists. Compliance with such policies and regulations are core to the way PMI operates. While in some circumstances compliance with country-specific legislation increases operating costs, it also provides PMI with the opportunity to reduce energy consumption, CO2 emissions and operational costs. PMI has adapted its financial planning to address climate risks and seize opportunities related to direct and indirect costs, capital expenditure and allocation, and assets in the short (0-1 year), medium (1-5 years) and long- time horizons (5-15 years). Some examples of how financial planning has been influenced by climate-related risks and opportunities include: - renewable energy generation subsidies are factored into our cost-benefit analyses to improve return on investment, estimated to be over $1 million throughout our global operations and is already implemented in our sites like in Italy, Turkey, Lithuania, Ukraine, Serbia, Greece, Portugal, Indonesia and Mexico; - schemes such as the EU Emission Trading Scheme (EU ETS), which covers in 2021, 3 PMI owned and operated factories in the Netherlands, Romania and Italy. The expansion of the EU ETS to include EU accession countries where PMI has facilities have influenced our investments with energy saving initiatives, our Drive 4 Zero Program and our portfolio of zero-carbon technologies (ZCT). E.g., in 2021 in our manufacturing site in Italy, a complex solution space has been developed, incl. the site's electrification plans to enable exiting EU ETS and de-risking externalities related to energy and ETS price volatility. A mix of technologies from thermal electrification via heat pumps, electric boiler and in-house PV plants are expected to be operational by 2025. This solution is expected to deliver 62 GWh annually, improving at the same time the overall heat generation efficiency by 6%, against an investment of approx. $10.2million. This provides us with the opportunity to apply our experience in these new countries or other regions considering introducing similar schemes; - energy taxes, such as in Germany, incentivized us to implement an Energy Management Program according to ISO 50001, saving us an estimated $800k in energy tax reductions. For our global operations, such levies and taxes are estimated at around $2 million. The transition risk of increased production costs for farmers due to changing input prices, specifically diesel costs, has been evaluated as having a potential medium to low impact in the long term on tobacco procurement expenditure o from third-party leaf suppliers and directly contracted farmers. PMI's supply chain and its purchases of tobacco leaf are influenced by the cost of production for farmers, with mechanized activities at field level (i.e., dependent on diesel) for approximately 80% of our purchased volume. If diesel prices increase the overall cost of producing raw tobacco at directly contracted farms, as well as the cost of sourcing tobacco from third-party leaf suppliers, will increase as a result, causing associated indirect increase in procurement costs as the price of tobacco would respond to upward pressure on the cost of production. Since 2002 we have been implementing the Good Agricultural Practices (GAP) program. GAP is a program with mandatory requirements for our tobacco suppliers and their contracted farmers, which provides specific guidance on initiatives to mitigate tobacco growing risks and impacts related to climate change such as transition market risks related to fuel prices increase. A set annual budget is allocated to initiatives to promote the adoption of improved and innovative practices by the farmers in our supply chain lowering fuel consumption, dependency on fuel and overall production costs. Over the past years, the raising attention of PMI to mitigate climate change related risks influenced our financial planning and resulted in an increase of the yearly allocated budget to support farmers in its supply chain to improve their resiliency and seize opportunities in the low carbon economy. Strategic initiatives include improving efficiency and reducing mechanized activities at field stage, improving tobacco curing efficiency and switching to low-carbon energies, and thus making tobacco suppliers, their farmers and PMI more resilient to price increments on diesel and diesel products, for instance. In 2021, based on our financial planning PMI allocated an annual budget accounting for approx. $5.3 million in investments in climate risk mitigation practices under the GAP program word wide. Similar yearly investment is expected over the next 10 years (long term). In 2021, the gradual switch to renewable sources and efficiency led to: - 75% of flue-cured tobacco we purchased was cured using renewable and traceable fuels (mainly in PK, PH, IT, ES, MW, MZ, BR and AR); - increased collaboration with PMI Leaf suppliers on climate change related risks and shared value creation. In 2021, we revised our internal carbon price set at $65/ton CO2e to identify where to act by comparing and ranking relevant GHG reduction projects globally based on their cost-effectiveness in reducing emissions and drive the expenditures needed prioritizing our list of initiatives. e.g., in the approval of the ZCT solution for our site in Italy in 2021. In addition, $10million/year in our energy management program and $200thousand/year to maintain our global energy metering system. Based on the investments made in previous years we evaluated an expected annual budget for capital expenditures of $16-20 million per year over a 6-7 years' timeframe. We have an extensive risk control program whereby locations with values exceeding $30 million are surveyed by engineers from our property insurer including physical risks. We have several locations that do have natural catastrophe exposures including flood risk, however this is addressed through risk improvement recommendations for physical mitigation solutions or implementation/reinforcement of management (administrative) controls such as protect openings, raise equipment, and implement Flood Emergency Response Plans. In 2021 we had 15 open recommendations (7 related to earthquake, 6 related to flood, and 2 related to wind) at 12 inspected locations (9 PMI owned, 3 third party warehouses) with loss expectancies over $10 million. This information is reviewed regularly with top management. It enables risk/opportunity identification and management at the company and asset level. From our Climate-Change Risks Assessment, we have identified revenues, and access to capital as not yet impacted, and acquisitions & divestments and liabilities as not impacted at all.

C3.5

(C3.5) In your organization's financial accounting, do you identify spending/revenue that is aligned with your organization's transition to a 1.5°C world?

No, but we plan to in the next two years

C4. Targets and performance

C4.1

(C4.1) Did you have an emissions target that was active in the reporting year?

Absolute target

C4.1a

(C4.1a) Provide details of your absolute emissions target(s) and progress made against those targets.

Target reference number

Abs 1

Year target was set

2020

Target coverage

Company-wide

Scope(s)

Scope 1

Scope 2

Scope 2 accounting method
Market-based

Scope 3 category(ies)
<Not Applicable>

Base year
2019

Base year Scope 1 emissions covered by target (metric tons CO2e)
397210

Base year Scope 2 emissions covered by target (metric tons CO2e)
158672

Base year Scope 3 emissions covered by target (metric tons CO2e)
<Not Applicable>

Total base year emissions covered by target in all selected Scopes (metric tons CO2e)
555882

Base year Scope 1 emissions covered by target as % of total base year emissions in Scope 1
100

Base year Scope 2 emissions covered by target as % of total base year emissions in Scope 2
100

Base year Scope 3 emissions covered by target as % of total base year emissions in Scope 3 (in all Scope 3 categories)
<Not Applicable>

Base year emissions covered by target in all selected Scopes as % of total base year emissions in all selected Scopes
100

Target year
2030

Targeted reduction from base year (%)
50

Total emissions in target year covered by target in all selected Scopes (metric tons CO2e) [auto-calculated]
277941

Scope 1 emissions in reporting year covered by target (metric tons CO2e)
308822.2

Scope 2 emissions in reporting year covered by target (metric tons CO2e)
64217.4

Scope 3 emissions in reporting year covered by target (metric tons CO2e)
<Not Applicable>

Total emissions in reporting year covered by target in all selected scopes (metric tons CO2e)
373039.6

% of target achieved relative to base year [auto-calculated]
65.7846089637729

Target status in reporting year
Underway

Is this a science-based target?
Yes, and this target has been approved by the Science Based Targets initiative

Target ambition
1.5°C aligned

Please explain target coverage and identify any exclusions
As per SBTi Submission guidance, the target boundary also includes biogenic emissions and removals (reported separately from the scopes), and which accounted in the base year for:
Direct CO2 emissions from combustion of biofuels and/or biomass feedstocks for the full value chain: 2,431,162 tCO2
Estimated CO2 removals related to the use of biofuels and/or biomass feedstocks for the full value chain: -2,321,922 tCO2
Please note that the total Scopes 1 and 2 emissions 2021 value (373,039.6 tCO2e) does not exactly match figure from the verification statement (373,040 tCO2e) due to rounding.

Plan for achieving target, and progress made to the end of the reporting year
In 2021, we achieved a 33% reduction versus our 2019 baseline. This achievement has been possible thanks to increased energy efficiency in our factories, on-site renewable investments, sourcing power from renewable resources and a program to reduce emissions in our vehicles fleet.
Plans for achieving targets include accelerating our use of renewable energy, increasing the efficiency of our manufacturing processes and fleet, and advancing technologies to decarbonize our supply chain.

List the emissions reduction initiatives which contributed most to achieving this target
<Not Applicable>

Target reference number
Abs 2

Year target was set
2020

Target coverage

Company-wide

Scope(s)
Scope 3

Scope 2 accounting method
<Not Applicable>

Scope 3 category(ies)
Category 1: Purchased goods and services
Category 2: Capital goods
Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2)
Category 4: Upstream transportation and distribution
Category 5: Waste generated in operations
Category 6: Business travel
Category 7: Employee commuting
Category 9: Downstream transportation and distribution
Category 11: Use of sold products
Category 12: End-of-life treatment of sold products

Base year
2019

Base year Scope 1 emissions covered by target (metric tons CO2e)
<Not Applicable>

Base year Scope 2 emissions covered by target (metric tons CO2e)
<Not Applicable>

Base year Scope 3 emissions covered by target (metric tons CO2e)
4494015

Total base year emissions covered by target in all selected Scopes (metric tons CO2e)
4494015

Base year Scope 1 emissions covered by target as % of total base year emissions in Scope 1
<Not Applicable>

Base year Scope 2 emissions covered by target as % of total base year emissions in Scope 2
<Not Applicable>

Base year Scope 3 emissions covered by target as % of total base year emissions in Scope 3 (in all Scope 3 categories)
100

Base year emissions covered by target in all selected Scopes as % of total base year emissions in all selected Scopes
100

Target year
2030

Targeted reduction from base year (%)
50

Total emissions in target year covered by target in all selected Scopes (metric tons CO2e) [auto-calculated]
2247007.5

Scope 1 emissions in reporting year covered by target (metric tons CO2e)
<Not Applicable>

Scope 2 emissions in reporting year covered by target (metric tons CO2e)
<Not Applicable>

Scope 3 emissions in reporting year covered by target (metric tons CO2e)
3748477

Total emissions in reporting year covered by target in all selected scopes (metric tons CO2e)
3748477

% of target achieved relative to base year [auto-calculated]
33.1791504923771

Target status in reporting year
Underway

Is this a science-based target?
Yes, and this target has been approved by the Science Based Targets initiative

Target ambition
1.5°C aligned

Please explain target coverage and identify any exclusions
As per SBTi Submission guidance, the target boundary also includes biogenic emissions and removals (reported separately from the scopes), and which accounted in the base year for:
Direct CO2 emissions from combustion of biofuels and/or biomass feedstocks for the full value chain: 2,431,162 tCO2
Estimated CO2 removals related to the use of biofuels and/or biomass feedstocks for the full value chain: -2,321,922 tCO2

Plan for achieving target, and progress made to the end of the reporting year
In 2021, we achieved a 17% reduction versus our 2019 baseline. This achievement has been possible thanks to initiatives to reduced emissions in our supply chain, for example initiatives related to curing fuels and mechanized activities in our tobacco supply chain which are still ongoing together with other initiatives throughout our value chain.

Plan for achieving targets includes addressing scope 3 emissions through multiple initiatives including the Good Agriculture Practices program, the Zero Deforestation Manifesto, and the eco-design and circularity program, which applies circular economy concepts and product life-time optimization.

List the emissions reduction initiatives which contributed most to achieving this target
<Not Applicable>

Target reference number
Abs 3

Year target was set
2016

Target coverage
Company-wide

Scope(s)
Scope 1
Scope 2

Scope 2 accounting method
Market-based

Scope 3 category(ies)
<Not Applicable>

Base year
2010

Base year Scope 1 emissions covered by target (metric tons CO2e)
443186

Base year Scope 2 emissions covered by target (metric tons CO2e)
470864

Base year Scope 3 emissions covered by target (metric tons CO2e)
<Not Applicable>

Total base year emissions covered by target in all selected Scopes (metric tons CO2e)
914050

Base year Scope 1 emissions covered by target as % of total base year emissions in Scope 1
100

Base year Scope 2 emissions covered by target as % of total base year emissions in Scope 2
100

Base year Scope 3 emissions covered by target as % of total base year emissions in Scope 3 (in all Scope 3 categories)
<Not Applicable>

Base year emissions covered by target in all selected Scopes as % of total base year emissions in all selected Scopes
100

Target year
2030

Targeted reduction from base year (%)
40

Total emissions in target year covered by target in all selected Scopes (metric tons CO2e) [auto-calculated]
548430

Scope 1 emissions in reporting year covered by target (metric tons CO2e)
308822.2

Scope 2 emissions in reporting year covered by target (metric tons CO2e)
64217.4

Scope 3 emissions in reporting year covered by target (metric tons CO2e)
<Not Applicable>

Total emissions in reporting year covered by target in all selected scopes (metric tons CO2e)
373039.6

% of target achieved relative to base year [auto-calculated]
147.970679940922

Target status in reporting year
Achieved

Is this a science-based target?
Yes, and this target has been approved by the Science Based Targets initiative

Target ambition
Well-below 2°C aligned

Please explain target coverage and identify any exclusions
This target covers Scopes 1 and 2 emissions from owned and operated buildings, factories and fleet. In 2016 we submitted this target, and it was approved by the Science Based Target initiative (SBTi) in 2017.
Please note that the total Scopes 1 and 2 emissions 2021 value is rounded in external verification statement attached.

Plan for achieving target, and progress made to the end of the reporting year

<Not Applicable>

List the emissions reduction initiatives which contributed most to achieving this target
In 2021, we achieved 59% reduction versus our 2010 baseline exceeding by 19% the target set (i.e., 40% reduction by 2030) and thus resulting in 147.5% achieved (59%/40%*100=147.5%). This achievement has been possible thanks to increased energy efficiency in our factories, on-site renewable investments, sourcing power from renewable resources and a program to reduce emissions in our vehicles fleet.
Since the beginning of the pandemic, the priority has been to ensure the safety of our employees and their families. The company immediately activated the remote work policy and tools across our operations. With our people staying at home, energy consumption consequently dropped in the offices that stayed completely closed and increased in the facilities that stayed operational, with reduced capacity, due to the intensive operation of the ventilation systems; in total, our emissions from the offices dropped in 2021 by an additional 3% percent versus 2020 (46% reduction vs. pre-pandemic situation in 2019). In 2021, kilometers driven by our fleet increased by 6% while emissions were able to remain flat due to our efforts in investing in sustainable powertrains and effective driving to optimize energy consumption while improving operational efficiency.
We consider the Covid-19 related reductions to be a temporary event, driven by an extraordinary emergency, the great majority of our carbon emission reductions has been achieved by dedicated projects in energy efficiency and switches to renewable energy between 2010-2021. This is what we consider to be a permanent result that we will continue to strive through implementation of our carbon reduction strategy.

Target reference number
Abs 4

Year target was set
2016

Target coverage
Company-wide

Scope(s)
Scope 1
Scope 2

Scope 2 accounting method
Market-based

Scope 3 category(ies)
<Not Applicable>

Base year
2010

Base year Scope 1 emissions covered by target (metric tons CO2e)
443186

Base year Scope 2 emissions covered by target (metric tons CO2e)
470864

Base year Scope 3 emissions covered by target (metric tons CO2e)
<Not Applicable>

Total base year emissions covered by target in all selected Scopes (metric tons CO2e)
914050

Base year Scope 1 emissions covered by target as % of total base year emissions in Scope 1
100

Base year Scope 2 emissions covered by target as % of total base year emissions in Scope 2
100

Base year Scope 3 emissions covered by target as % of total base year emissions in Scope 3 (in all Scope 3 categories)
<Not Applicable>

Base year emissions covered by target in all selected Scopes as % of total base year emissions in all selected Scopes
100

Target year
2040

Targeted reduction from base year (%)
60

Total emissions in target year covered by target in all selected Scopes (metric tons CO2e) [auto-calculated]
365620

Scope 1 emissions in reporting year covered by target (metric tons CO2e)
308822.2

Scope 2 emissions in reporting year covered by target (metric tons CO2e)
64217.4

Scope 3 emissions in reporting year covered by target (metric tons CO2e)
<Not Applicable>

Total emissions in reporting year covered by target in all selected scopes (metric tons CO2e)
373039.6

% of target achieved relative to base year [auto-calculated]
98.6471199606148

Target status in reporting year
Underway

Is this a science-based target?

Yes, and this target has been approved by the Science Based Targets initiative

Target ambition
Well-below 2°C aligned

Please explain target coverage and identify any exclusions
This target covers Scopes 1 and 2 emissions from owned and operated buildings, factories and fleet. In 2016 we submitted this target, and it was approved by the Science Based Target initiative (SBTi) in 2017.
Please note that the total Scopes 1 and 2 emissions 2021 value is rounded in external verification statement attached.

Plan for achieving target, and progress made to the end of the reporting year
In 2021, we achieved a 59% reduction versus our 2010 baseline and thus 98% achieved (59%/60%*100=98%). This achievement has been possible thanks to increased energy efficiency in our factories, on-site renewable investments, sourcing power from renewable resources and a program to reduce emissions in our vehicles fleet. Plans for achieving targets include accelerating our use of renewable energy, increasing the efficiency of our manufacturing processes and fleet, and advancing technologies to decarbonize our supply chain.

List the emissions reduction initiatives which contributed most to achieving this target
<Not Applicable>

Target reference number
Abs 5

Year target was set
2016

Target coverage
Company-wide

Scope(s)
Scope 1
Scope 2
Scope 3

Scope 2 accounting method
Market-based

Scope 3 category(ies)
Category 1: Purchased goods and services
Category 2: Capital goods
Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2)
Category 4: Upstream transportation and distribution
Category 5: Waste generated in operations
Category 6: Business travel
Category 7: Employee commuting
Category 9: Downstream transportation and distribution
Category 11: Use of sold products
Category 12: End-of-life treatment of sold products

Base year
2010

Base year Scope 1 emissions covered by target (metric tons CO2e)
443186

Base year Scope 2 emissions covered by target (metric tons CO2e)
470864

Base year Scope 3 emissions covered by target (metric tons CO2e)
7148225

Total base year emissions covered by target in all selected Scopes (metric tons CO2e)
8062275

Base year Scope 1 emissions covered by target as % of total base year emissions in Scope 1
100

Base year Scope 2 emissions covered by target as % of total base year emissions in Scope 2
100

Base year Scope 3 emissions covered by target as % of total base year emissions in Scope 3 (in all Scope 3 categories)
100

Base year emissions covered by target in all selected Scopes as % of total base year emissions in all selected Scopes
100

Target year
2030

Targeted reduction from base year (%)
40

Total emissions in target year covered by target in all selected Scopes (metric tons CO2e) [auto-calculated]
4837365

Scope 1 emissions in reporting year covered by target (metric tons CO2e)
308822

Scope 2 emissions in reporting year covered by target (metric tons CO2e)
64217

Scope 3 emissions in reporting year covered by target (metric tons CO2e)
3748477

Total emissions in reporting year covered by target in all selected scopes (metric tons CO2e)
4121516

% of target achieved relative to base year [auto-calculated]
122.197487681827

Target status in reporting year
Achieved

Is this a science-based target?
Yes, and this target has been approved by the Science Based Targets initiative

Target ambition
Well-below 2°C aligned

Please explain target coverage and identify any exclusions
This target covers Scopes 1, 2 and 3 emissions from all operations and our entire value chain. In 2016 we submitted the target that was approved by the Science Based Target initiative in 2017 (SBTi).

Plan for achieving target, and progress made to the end of the reporting year
<Not Applicable>

List the emissions reduction initiatives which contributed most to achieving this target
In 2021, we achieved a 49% reduction versus our 2010 baseline and thus 122.5% achieved (49%/40%*100=122.5%). This achievement has been possible thanks to progress in reducing our environmental impact across our value chain: in our factories and fleet where our carbon footprint is relatively small compared to other industries, as well as beyond the factory gates. This achievement was strongly driven by initiatives to optimize efficiency and reduce consumption while minimizing the use of fossil fuels and promoting the switch to renewable energy (such us procurement of green electricity and installing technology to self-produce or store green energy). In out tobacco supply chain, initiatives to reduced emissions from curing fuels and mechanized activities were key contributors to deliver on this result (for example, compared to our 2019 baseline, in 2021 we have reached 64% CO2e intensity reduction in emissions from curing).

C4.2

(C4.2) Did you have any other climate-related targets that were active in the reporting year?
Target(s) to increase low-carbon energy consumption or production
Net-zero target(s)
Other climate-related target(s)

C4.2a

(C4.2a) Provide details of your target(s) to increase low-carbon energy consumption or production.

Target reference number
Low 1

Year target was set
2019

Target coverage
Business activity

Target type: energy carrier
Electricity

Target type: activity
Consumption

Target type: energy source
Renewable energy source(s) only

Base year
2010

Consumption or production of selected energy carrier in base year (MWh)
0

% share of low-carbon or renewable energy in base year
0

Target year
2025

% share of low-carbon or renewable energy in target year
100

% share of low-carbon or renewable energy in reporting year
81

% of target achieved relative to base year [auto-calculated]
81

Target status in reporting year
Underway

Is this target part of an emissions target?
This target is directly linked with our Scopes 1 and 2 SBT absolute reduction target (Abs1 & Abs3 & Abs4).

Is this target part of an overarching initiative?
Science Based Targets initiative

Please explain target coverage and identify any exclusions
This target covers the amount of electricity purchased and self-generated from renewable sources. Our initial target, set in 2016, aimed at 100% renewable by 2030. This target was amended in 2019 for 100% by 2025 to reflect our increased ambition level.

Plan for achieving target, and progress made to the end of the reporting year
In 2021, 81% of our manufacturing facilities' electricity consumption was sourced from renewable sources versus our 2010 baseline where we were not sourcing/generating any. Thus 81% achieved (81%/100%*100=81%). This achievement has been possible mainly due to European factories sourcing or generating green electricity. In 2021, factories in Korea, Senegal, South Africa, Venezuela, a second factory in Argentina and in Indonesia switched to renewable electricity. We plan to continue sourcing more renewable electricity as it becomes available in the countries where we operate.
The 100% green electricity target covers all our factories and is part of PMI strategy to first and foremost drive toward a low-carbon economy by promoting the renewable energy industry as an alternative to fossil fueled energy and subsequently reduce our scope 2 emissions.
To achieve our ambitious Science Based Targets, PMI uses all the strategic tools and mechanisms that have been identified as good practices by the recognized international standards, including RE100 and EP100 guidelines to manage our company's energy consumption.

List the actions which contributed most to achieving this target
<Not Applicable>

C4.2b

(C4.2b) Provide details of any other climate-related targets, including methane reduction targets.

Target reference number
Oth 1

Year target was set
2020

Target coverage
Business division

Target type: absolute or intensity
Absolute

Target type: category & Metric (target numerator if reporting an intensity target)

Land use change	Percent of supply chain compliant with zero gross deforestation

Target denominator (intensity targets only)
<Not Applicable>

Base year
2017

Figure or percentage in base year
0

Target year
2025

Figure or percentage in target year
100

Figure or percentage in reporting year
100

% of target achieved relative to base year [auto-calculated]
100

Target status in reporting year
Achieved

Is this target part of an emissions target?
No

Is this target part of an overarching initiative?
Remove deforestation

Please explain target coverage and identify any exclusions
This target covers all our tobacco supply chain and assesses the proportion of tobacco purchased at no risk of gross deforestation of primary and protected forests.
To address the risks resulting from land-use change, we monitor the impact of land-use changes due to tobacco cultivation and design actions based on mitigation hierarchy when needed.
When reporting "Quantitative progress (in percent) towards the full implementation of your commitment in the recent financial year:" we have calculated and reported the quantitative progress related to the implementation of the zero gross deforestation target in 2021 for primary and protected forests. In 2021 our commitment of tobacco purchased at no risk of gross deforestation reached 100% and was validated by an external auditor against our Zero Deforestation Manifesto guidelines for suppliers.
In the short to medium term (1-3 years) PMI expects this target to be aligned with the GHG Protocol's 'Land Sector and Removals Guidance', which will allow us to account and report emissions and removals from land use, land use change, and our progress towards achieving our Zero Deforestation Manifesto commitments. This target is also expected to be integrated into PMI's approach to develop Forest, Land and Agriculture (FLAG) targets as part of the company's commitments to the Science Based Targets initiative.

Plan for achieving target, and progress made to the end of the reporting year
<Not Applicable>

List the actions which contributed most to achieving this target
Main actions/initiatives that contributed to achieving this target were two: geospatial analysis and the deployment of our Monitoring, Verification, and Reporting (MVR) Framework for Sustainable Curing Fuels across our entire flue-cured supply chain. Our geospatial analysis is based on the digitalization of our contracted tobacco farmers supply chain through the generation of shapefiles that include their farms and a buffer area where the impact on natural forest (primary and protected forest categories) could potentially happen; we monitor with analytical tools such as Global Forest Watch the whole area for all our shapefiles where wood-based fuels are used in the curing process. We calculate the risk of forest cover loss and where the indicator is above a certain threshold typical of each shapefile, we proceed to the ground truthing of the information by requesting an MVR audit on the ground to be executed.
The MVR audit, carried out by a third-party auditor, requires the traceability of firewood to ensure it originates from sustainable sources in line with the guidelines included in our Zero Deforestation Manifesto that defines our commitment to zero gross e zero net deforestation for the entire tobacco supply chain.

Target reference number
Oth 2

Year target was set
2015

Target coverage
Business division

Target type: absolute or intensity
Absolute

Target type: category & Metric (target numerator if reporting an intensity target)

Engagement with suppliers	Other, please specify (Percentage of Virginia Flue Cured tobacco suppliers disclosing GHG emission related data)

Target denominator (intensity targets only)
<Not Applicable>

Base year
2017

Figure or percentage in base year
0

Target year
2020

Figure or percentage in target year
100

Figure or percentage in reporting year

100

% of target achieved relative to base year [auto-calculated]
100

Target status in reporting year
Achieved

Is this target part of an emissions target?
Yes, Abs5

Is this target part of an overarching initiative?
Science Based targets initiative - other

Please explain target coverage and identify any exclusions
As tobacco accounted for around 40% of PMI's carbon footprint in our 2010 baseline, PMI set goals and developed strategic initiatives to reduce GHG emissions related to tobacco growing including the emissions generated by the fuels used for the flue-cured Virginia (FCV) tobacco curing process. At the corporate level, PMI uses its GHG emission inventory to track emission reductions and flag potential deviations to ensure swift responses. At the supplier level, PMI uses the Monitoring Framework (MF) for Sustainable Leaf Curing Fuel, a mandatory requirement for all flue-cured suppliers (i.e., 100%), which requires them to report primary data (e.g., curing fuel type, fuel consumption, barn type, etc.), allowing PMI to calculate the GHG emissions from the overall tobacco curing process. This figure is used within PMI's year-on-year value chain GHG footprint calculations, contributing to the Abs5 target highlighted in C4.1a.
The 3 strategic initiatives within the MF are: ▪ Reduce fuel consumption rate via curing efficiency improvement and curing barn optimization programs; ▪ Move from unsustainable to sustainable curing fuel sources; ▪ Encourage fuel switching to less polluting fuels and the use of biomass as an alternative to unsustainable wood fuels or fossil fuels where appropriate. The global roadmap for sustainable firewood aimed at supporting our tobacco suppliers to reach full implementation of the targets annually through engagement in capacity building activities with tobacco leaf suppliers and farmers. Our 2021 assurance process on curing fuel use in tobacco led by a third-party verification reported 100% compliance with the Monitoring Framework. We look forward to maintaining the compliance while raising the requirements annually in line with our renewed carbon neutrality ambitions.

Plan for achieving target, and progress made to the end of the reporting year
<Not Applicable>

List the actions which contributed most to achieving this target
Main actions/initiatives that contributed to achieve this target are moving from unsustainable to sustainable firewood used for curing; progressively reduce coal usage for curing and achieve zero coal by 2030; switching from non-renewable fuels to biomass; improvement on curing efficiency through barn upgrades & stakeholder engagement (internal and external).

C4.2c

(C4.2c) Provide details of your net-zero target(s).

Target reference number
NZ1

Target coverage
Company-wide

Absolute/intensity emission target(s) linked to this net-zero target
Abs1
Abs2

Target year for achieving net zero
2040

Is this a science-based target?
Yes, and this target has been approved by the Science Based Targets initiative

Please explain target coverage and identify any exclusions
In 2021 PMI released its Low Carbon Transition Plan (LCTP), which included updated targets as well as a detailed strategy to decarbonize its direct operations by 2025, and to achieve net-zero emissions across its entire value chain by 2040. The plan brings forward PMI's ambitions to achieve carbon neutrality in its direct operations (scopes 1+2) by five years, to 2025, and to achieve net-zero across its entire value chain (scopes 1+2+3) by 10 years, to 2040. PMI's net-zero target is aligned with a 1.5 °C scenario and was submitted to Science Based Targets initiative for validation in late 2021, being approved in 2022. During 2021, PMI also committed to Business ambition for1.5 °C by, signing the pledge (https://sciencebasedtargets.org/companies-taking-action#table) and joining the visionary corporate leaders taking ambitious climate action.

Do you intend to neutralize any unabated emissions with permanent carbon removals at the target year?
Yes

Planned milestones and/or near-term investments for neutralization at target year
We reduce energy consumption and optimize efficiency to cut emissions. We minimize the use of fossil fuels and promote switching to renewable energy including: 1) phasing out coal in manufacturing by 2020 (results PMI already achieved and is planning to maintain) 2) reaching 100% of electricity used and purchased in our factories derived from renewable sources by 2025. In our operations, we are reducing emissions and increasing efficiency with two main programs: Zero Carbon Technology (ZCT) and Drive4Zero (D4Zero). ZCT involves initiatives such as biomass burners combined with thermal storage and solar photovoltaics for carbon emissions reduction and carbon capture and storage.
PMI's activities in improving efficiency are categorized in our D4Zero program, which aims to eliminate economic losses caused by inefficient energy use. Under the program, we look for industrial and manufacturing solutions such as heat recovery and manufacturing-process optimization. We also promote behavioral change through our Zero Loss Mindset program.
Once we have maximized our emissions reductions, we compensate the remaining unavoidable emissions. In 2020, PMI developed a targeted study to map the potential of nature-based solutions (NBS) for insetting in our tobacco supply chain and evaluated natural carbon sinks in the context of our carbon neutrality ambition. We prioritize insetting projects in our supply chain when possible and purchase certified carbon credits when needed. Our Portfolio of Climate Investments (PCI) brings both standardization and sophistication to our approach to compensation. PMI will gradually shift from relying on offsets (emissions avoidance/reduction) toward developing and making use of emissions removals, including nature-based and innovative technological carbon sequestration projects.
To support decarbonization efforts and net-zero targets, the PCI was created in line with internationally recognized practices, such as International Carbon Reduction and Offsetting Alliance (ICROA) code of Best Practice, the report of the Taskforce on Scaling Voluntary Carbon Markets (TFVCM), and GHG protocol Land Sector and Removals Initiative. PMI believes that limiting the use of market approaches (offsetting) in the short term by prioritizing direct investment in our supply chain in the medium and long term will support the cost effectiveness of our actions and will assure transparency, consistency and quality of our climate investment strategy.

Planned actions to mitigate emissions beyond your value chain (optional)
PMI addresses scope 3 emissions through multiple initiatives, including engaging with suppliers to work on solutions and programs to reduce the full GHG footprint. Our work is guided by the Good Agriculture Practices program, the Zero Deforestation Manifesto, and the eco-design and circularity program, which applies circular economy concepts and product life-time optimization.
We aim at reducing emissions of our supply chain, focusing first on larger contributors to address their gaps while also considering performance of virtuous suppliers with efficient processes in place as an element in the allocation of business and volumes. D4Zero program applies beyond our direct operations where the zero-loss mindset is key to reduce the use of materials starting from the design of our products and benefiting productivity while reducing overall carbon emissions. As for the upstream emissions reductions, PMI aims at reducing the emissions from packaging in collaboration with suppliers leveraging technological improvements and improved packaging design to minimize the use of packaging materials without compromising protection and convenience.
PMI tackles emissions from upstream transportation with a strategy to proactively assess and select lower-carbon transportation carriers and transport routes. PMI will set targets to drive a successful roadmap including engaging with suppliers to promote emissions reduction strategies in line with carbon objectives while investigating improved/ alternative technologies to transport goods.
PMI is making efforts to minimize the waste generated by our manufacturing facilities and offices, promoting materials reuse and recycling, and striving for responsible disposal. PMI is committed to achieving virtually zero waste to landfill across all our manufacturing operations by 2022 – meaning a landfill diversion rate of 99 percent or greater.
To sustain the results achieved with further action and continuously improve our environmental practices, we are constantly working on projects to create circularity of materials in the supply chain to reduce waste generation to the bare minimum. Downstream, emissions generated by the transport and distribution, use, and end-of life management of the products represented 5% of PMI's total footprint in 2021. PMI is reducing the emissions from these sources through improvements in the heated tobacco units as well as the adoption of eco-system design standards.

C4.3

(C4.3) Did you have emissions reduction initiatives that were active within the reporting year? Note that this can include those in the planning and/or implementation phases.
Yes

C4.3a

(C4.3a) Identify the total number of initiatives at each stage of development, and for those in the implementation stages, the estimated CO2e savings.

	Number of initiatives	Total estimated annual CO2e savings in metric tonnes CO2e (only for rows marked *)
Under investigation	456	
To be implemented*	104	34055
Implementation commenced*	74	6179
Implemented*	145	201583
Not to be implemented	197	

C4.3b

(C4.3b) Provide details on the initiatives implemented in the reporting year in the table below.

Initiative category & Initiative type

Transportation	Company fleet vehicle replacement

Estimated annual CO2e savings (metric tonnes CO2e)
6221.6

Scope(s) or Scope 3 category(ies) where emissions savings occur
Scope 1

Voluntary/Mandatory
Voluntary

Annual monetary savings (unit currency – as specified in C0.4)
2542628

Investment required (unit currency – as specified in C0.4)
0

Payback period
<1 year

Estimated lifetime of the initiative
3-5 years

Comment
This initiative reflects the CO2e saved through the replacement of greener vehicle (both benefit vehicle and working tools) within PMI fleet.
The monetary savings are calculated on the amount of fuel saved multiplied by an average worldwide price for fuel in 2021.

Initiative category & Initiative type

Energy efficiency in buildings	Heating, Ventilation and Air Conditioning (HVAC)

Estimated annual CO2e savings (metric tonnes CO2e)
1044.8

Scope(s) or Scope 3 category(ies) where emissions savings occur
Scope 1
Scope 2 (location-based)

Voluntary/Mandatory
Voluntary

Annual monetary savings (unit currency – as specified in C0.4)
769436

Investment required (unit currency – as specified in C0.4)
1144754

Payback period
1-3 years

Estimated lifetime of the initiative
6-10 years

Comment
19 initiatives in HVAC systems optimization and modernizations in existing units in our manufacturing centers.

Initiative category & Initiative type

Energy efficiency in buildings	Lighting

Estimated annual CO2e savings (metric tonnes CO2e)
22.8

Scope(s) or Scope 3 category(ies) where emissions savings occur

Scope 2 (location-based)

Voluntary/Mandatory
Voluntary

Annual monetary savings (unit currency – as specified in C0.4)
183266

Investment required (unit currency – as specified in C0.4)
387993

Payback period
1-3 years

Estimated lifetime of the initiative
6-10 years

Comment
These are initiatives mainly focused on installation of LED lighting in our factories. In total 10 initiatives in 2021.

Initiative category & Initiative type

Energy efficiency in production processes	Compressed air

Estimated annual CO2e savings (metric tonnes CO2e)
1555.1

Scope(s) or Scope 3 category(ies) where emissions savings occur
Scope 2 (location-based)

Voluntary/Mandatory
Voluntary

Annual monetary savings (unit currency – as specified in C0.4)
946949

Investment required (unit currency – as specified in C0.4)
2479558

Payback period
1-3 years

Estimated lifetime of the initiative
6-10 years

Comment
29 initiatives implemented in our factories compressed air systems, mainly focusing on the decrease of pressure, equipment modernization, leakages prevention, to name some.

Initiative category & Initiative type

Energy efficiency in production processes	Cooling technology

Estimated annual CO2e savings (metric tonnes CO2e)
46

Scope(s) or Scope 3 category(ies) where emissions savings occur
Scope 2 (location-based)

Voluntary/Mandatory
Voluntary

Annual monetary savings (unit currency – as specified in C0.4)
205349

Investment required (unit currency – as specified in C0.4)
454083

Payback period
1-3 years

Estimated lifetime of the initiative
6-10 years

Comment
14 initiatives in central cooling systems implemented in our factories in 2021.

Initiative category & Initiative type

Energy efficiency in production processes	Automation

Estimated annual CO2e savings (metric tonnes CO2e)
3394.6

Scope(s) or Scope 3 category(ies) where emissions savings occur
Scope 2 (location-based)

Voluntary/Mandatory
Voluntary

Annual monetary savings (unit currency – as specified in C0.4)
447225

Investment required (unit currency – as specified in C0.4)
983730

Payback period
1-3 years

Estimated lifetime of the initiative
6-10 years

Comment
41 automation related initiatives implemented in our factories in 2021.

Initiative category & Initiative type

Energy efficiency in production processes	Reuse of water

Estimated annual CO2e savings (metric tonnes CO2e)
204

Scope(s) or Scope 3 category(ies) where emissions savings occur
Scope 2 (location-based)

Voluntary/Mandatory
Voluntary

Annual monetary savings (unit currency – as specified in C0.4)
19578

Investment required (unit currency – as specified in C0.4)
31712

Payback period
1-3 years

Estimated lifetime of the initiative
6-10 years

Comment
2 initiatives for reuse of water in 2 factories in 2021.

Initiative category & Initiative type

Energy efficiency in production processes	Waste heat recovery

Estimated annual CO2e savings (metric tonnes CO2e)
1828.1

Scope(s) or Scope 3 category(ies) where emissions savings occur
Scope 1
Scope 2 (location-based)

Voluntary/Mandatory
Voluntary

Annual monetary savings (unit currency – as specified in C0.4)
429714

Investment required (unit currency – as specified in C0.4)
776749

Payback period
1-3 years

Estimated lifetime of the initiative
6-10 years

Comment
In 2021 we implemented 22 initiatives in our manufacturing centers to recover heat from our steam system.

Initiative category & Initiative type

Energy efficiency in production processes	Motors and drives

Estimated annual CO2e savings (metric tonnes CO2e)
0

Scope(s) or Scope 3 category(ies) where emissions savings occur
Scope 2 (market-based)

Voluntary/Mandatory
Voluntary

Annual monetary savings (unit currency – as specified in C0.4)
33836

Investment required (unit currency – as specified in C0.4)
83390

Payback period
1-3 years

Estimated lifetime of the initiative
6-10 years

Comment
In 2021 we implemented 3 initiatives aiming to optimize our drives systems generating energy and cost savings. Each initiative was implemented in one of our manufacturing centers that already source 100% of renewable electricity.

Initiative category & Initiative type

Low-carbon energy consumption	Low-carbon electricity mix

Estimated annual CO2e savings (metric tonnes CO2e)
25721.4

Scope(s) or Scope 3 category(ies) where emissions savings occur
Scope 2 (market-based)

Voluntary/Mandatory
Voluntary

Annual monetary savings (unit currency – as specified in C0.4)
0

Investment required (unit currency – as specified in C0.4)
51763

Payback period
No payback

Estimated lifetime of the initiative
1-2 years

Comment
Renewable energy (certified green electricity) procurement for most of our manufacturing facilities. This program started in 2014 and in 2021 expanded to new countries like Indonesia, Argentina, Brazil, South Korea, Pakistan, Senegal, Venezuela and South Africa. Certificates are available for 2021. Investment is the current additional amount paid for green electricity.

Initiative category & Initiative type

Company policy or behavioral change	Resource efficiency

Estimated annual CO2e savings (metric tonnes CO2e)
28220

Scope(s) or Scope 3 category(ies) where emissions savings occur
Scope 3 category 1: Purchased goods & services

Voluntary/Mandatory
Voluntary

Annual monetary savings (unit currency – as specified in C0.4)
42440000

Investment required (unit currency – as specified in C0.4)
0

Payback period
No payback

Estimated lifetime of the initiative
3-5 years

Comment
Productivity program co-lead by Procurement and Product Development teams focusing on Direct Materials (DIMs) to identify and implement opportunities for: specification harmonization, specification optimization thru down gauging, material usage optimization and reduction, material substitution, waste optimization/reduction and reuse, and material removal. No investment is required since the further deployed specifications are already existing and running on our production lines and do not require capex. The Program was initiated beginning of 2019, with first deployment on our production lines of certain projects in 2019 following quality and machinability tests. Some other initiatives, requiring more extensive testing procedures and/or production capacity planning on supplier's side, were commenced also in 2020.
Scope 3: category 1 purchased goods

Initiative category & Initiative type

Company policy or behavioral change	Other, please specify (Increase Supply Chain network visibility to improve demand forecasts and optimize production planning, reducing requirements of DIM)

Estimated annual CO2e savings (metric tonnes CO2e)
28708

Scope(s) or Scope 3 category(ies) where emissions savings occur
Scope 3 category 1: Purchased goods & services

Voluntary/Mandatory
Voluntary

Annual monetary savings (unit currency – as specified in C0.4)
53240000

Investment required (unit currency – as specified in C0.4)
0

Payback period
No payback

Estimated lifetime of the initiative
6-10 years

Comment
Our Direct Materials expenditure has a strong link with our ability to forecast our production requirements to serve the demand.
Also, the carbon footprint linked to DIM usage is determined by the quantity of such materials that we are required to purchase each year to feed our production lines.
While demand suffers short term notice major fluctuations, the industrial processes behind the supply chains of DIM has not the required flexibility to adjust accordingly.
Indeed, lot sizes are applied to purchase orders with minimum order quantities requirements from suppliers. This creates leftovers of DIM ordered, delivered and unused.
These materials have many specificities [designs, languages, sizes, machine park specificities] that generates low interchangeability and/or re-usability levels in case of leftovers from production.
This program aims at increasing our demand planning capability, by installing new processes and tools, reducing the amount of leftovers from production by better adjusting our requirements' call offs to our production needs.

Initiative category & Initiative type

Company policy or behavioral change	Resource efficiency

Estimated annual CO2e savings (metric tonnes CO2e)
104616.6

Scope(s) or Scope 3 category(ies) where emissions savings occur
Scope 3 category 1: Purchased goods & services

Voluntary/Mandatory
Voluntary

Annual monetary savings (unit currency – as specified in C0.4)
0

Investment required (unit currency – as specified in C0.4)
5300000

Payback period
No payback

Estimated lifetime of the initiative
6-10 years

Comment
In our tobacco supply chain, we achieved an absolute reduction in 2021 of 104,617 tons of CO2e vs 2020 from improvements in tobacco curing process and fertilizer use, which are the main GHG emission contributors within tobacco scope 3 sub-categories. While most farmers own their curing barns, PMI and our suppliers provide guidance and support to make them more fuel-efficient (e.g., combustion efficiency, ventilation, and heating control, insulation), monitoring the results in GHG reduction. The improvement projects carried out in 2021 increased the efficiency of 11,181 barns in all markets where we source from, for a cumulative total of 93,700 barns upgraded since 2014. In 2021, we delivered improvement projects around the world, including training farmers on fuel efficiency. We are seeing farmer profitability improve as a result of cost savings on farms.
While we encourage minimizing the use of fertilizers in our supply chain in line with our Good Agricultural Practices (GAP) program, technological developments in the manufacturing process for fertilizers have also contributed to reducing their GHG footprint. In 2019, PMI updated its calculation model for fertilizers' GHG emissions to more precisely assess their impact on the company's carbon footprint in addition to further decrease in fertilizer use. The internal investment of $5.3M reflects the annual budget allocated in 2021 to environmental projects under the GAP across all regions. Scope 3: category 1 purchased goods.

C4.3c

(C4.3c) What methods do you use to drive investment in emissions reduction activities?

Method	Comment
Dedicated budget for energy efficiency	Our Energy Management Program (over $100 million in investments since 2010) aims to reduce our factories' energy consumption and help achieve greenhouse gas emissions reduction targets. In 2021 we achieved a reduction of 33% of our Scope 1 and 2 compared to our 2019 baseline and progressing towards our carbon neutrality target for Scope 1 and 2 by 2025. Our Drive 4 Zero program, which aims to eliminate economic losses caused by inefficient energy use. Under the program, we look for industrial and manufacturing solutions such as heat recovery and manufacturing-process optimization. We also promote behavioral change through our Zero Loss Mindset program. To support our Drive 4 Zero program, an Energy Saving Initiatives (ESIs) program has been started in 2019, triggering more than 500 projects worldwide including among many others LED lighting, HVAC upgrade, chilled water optimization and heat recovery projects.
Marginal abatement cost curve	We consider a longer rate of return (4 years or more) for certain energy savings and renewable energy projects. A Marginal Abatement Cost Curve (MACC) methodology has been developed and applied to evaluate carbon emission reduction related projects.
Dedicated budget for other emissions reduction activities	We have developed a renewable energy strategy with an initial focus on low-carbon electricity uptake in the EU. We commenced the program in 2012 and continued to implement it in more facilities in 2021. We continue to seek new opportunities to purchase and/or self-generate green energy. In order to drive the adoption of low-carbon electricity sources within our entire organization, we set the more stringent target to reach 100% of electricity used and purchased in our factories derived from renewable sources by 2025. We are progressing well as we have already reached 81% in 2021.
Compliance with regulatory requirements/standards	Compliance with policies and regulations are core to the way PMI operates. In some circumstances compliance with regulatory requirements and standards it also provides PMI with the opportunity to achieve energy/emissions reductions and particularly when investing in new processes (e.g., requirements for renewable energy or energy efficiency) for new or upgraded facilities in Greece and Italy, under EU ETS scheme. This has allowed us to delist sites in Germany and Portugal from the EU ETS scheme in previous years.
Employee engagement	Employee engagement is implemented through our objective setting, Long-Range Planning process and via employee communications, sharing of tools, guidance and best practices. In 2021, the communication team in PMI Operations supported the engagement of all operations employees (more than 20,000 people are working in PMI's operations worldwide) who received senior management briefings on sustainability topics including Climate Change, carbon footprint, renewable energies, etc. Local market EHS/Sustainability managers and Sustainability coordinators run specific focus days and campaigns in all markets where we operate.
Other (Dedicated budget to incentivize other emissions reduction initiative in our agricultural supply chain)	GAP is a broad program with 4 sustainability-related pillars – governance, people, crop and environment – implemented by our leaf suppliers and contracted farmers. It promotes an Integrated Production System which supports farmers in improving yield and farm efficiency on a variety of crops (particularly food crops) and not only tobacco. Through GAP, environmental improvement programs are implemented in all the countries where we source tobacco around the world; these programs include among others: curing barn efficiency improvements; curing fuel switching to low GHG emitting fuels; eliminating the use of coal; increasing the use of biomass; and helping farmers become wood self-sufficient and seeking traceable sources of sustainable wood.
Internal price on carbon	In line with our ambition to reduce carbon emissions aligning with the 1.5-degree target since 2020 we have applied a shadow carbon price to help ensure that business decisions reflect environmental costs by putting a price on carbon emissions. We have modelled what an adequate internal shadow carbon price should be for PMI following a robust methodology, best international practices, and a worst-case scenario analysis of transition risks projected by 2030 and specific to our emission profile and the geographies where we operate. We have concluded that an adequate shadow carbon price for PMI is US$ 65 per ton of CO2e emitted. This will continue to be used in all business cases preparation when they entail an impact (favorable or unfavorable) on our carbon emissions.
Internal finance mechanisms	Carbon reduction and compensation projects are stimulated and promoted at PMI through the adoption of an internal financial mechanism that uses an internal virtual carbon levy to support adoption of new technology and invest in impactful projects in GHG reduction/avoidance/removal. PMI carbon levy enables us to internalize external costs by virtually charging our business functions or affiliates for their respective emissions. With the aim of using calculated virtual revenue to size and fund investments that contribute to the decarbonization of the business and support behavioral change. The levy is collected in a climate fund (the PMI Portfolio of Climate Investments) to finance high quality carbon credits and removal projects aligning with the demanding additional attributes PMI has set for them.
Dedicated budget for low-carbon product R&D	Amongst others, our 2025 eco-design and circularity ambitions are to provide access to collection and recovery for the device and its consumables to all IQOS users and continue to reduce the carbon footprint of our smoke-free products in line with our science-based targets. The way we work is guided by the foundation principles of eco-design and circularity, which account for impacts related to materials sourcing, product function and design, manufacturing, use, and end-of-life. In our operations, eco-design principles inform how we use life-cycle analysis (LCA) to assess the comparative carbon footprint of our products, from tobacco sourcing to end-of-life impacts. Our long-term vision remains to recycle any waste that we collect while minimizing our CO2 footprint. In 2020, we advanced our discussion with several waste management and recycling partners on potential second life that we could give to our recycled HTUs. Our exploration is primarily focused on the recycling of the cellulose acetate, one of the materials our filters are made from. Our investigations to date show chemical properties of cellulose acetate enable the material to be upcycled into a variety of applications: spinning of the fibers into fabrics, creation of pellets that can then be pressed/injection molded into a variety of hard goods. Though these results are promising, the recycling of cellulose acetate – unlike recycling for many metals or plastics – is not a widely available and developed waste stream across the globe that we can leverage. When IQOS users return broken or end-of service devices, our reverse-logistics program CIRCLE helps to cycle materials back into the economy. In 2021, we continued the rollout of our CIRCLE program, achieving 63% market volume coverage (up from 48% in 2020, target is 100% in 2025), reaching a total of 14 markets covered by the program. In addition to developing services to reduce the end-of-life impact of our products, our innovation and design teams are also exploring low carbon, recyclable, and biodegradable options for filters and cartridges. We are committed to significant investment into continued research on the biodegradability of filters, and we are working toward a viable solution that meets strict international standards, satisfies market requirements, and works with high volume manufacturing.

C4.5

(C4.5) Do you classify any of your existing goods and/or services as low-carbon products?

No

C5. Emissions methodology

C5.1

(C5.1) Is this your first year of reporting emissions data to CDP?

No

C5.1a

(C5.1a) Has your organization undergone any structural changes in the reporting year, or are any previous structural changes being accounted for in this disclosure of emissions data?

Row 1

Has there been a structural change?
No

Name of organization(s) acquired, divested from, or merged with
<Not Applicable>

Details of structural change(s), including completion dates
<Not Applicable>

C5.1b

(C5.1b) Has your emissions accounting methodology, boundary, and/or reporting year definition changed in the reporting year?

	Change(s) in methodology, boundary, and/or reporting year definition?	Details of methodology, boundary, and/or reporting year definition change(s)
Row 1	No	<Not Applicable>

C5.2

(C5.2) Provide your base year and base year emissions.

Scope 1

Base year start
January 1 2019

Base year end
December 31 2019

Base year emissions (metric tons CO2e)
397210

Comment
In 2020 we updated our baseline year, moving it from 2010 to 2019, to account for changes in our footprint and business model. The rapid expansion of smoke free products in our portfolio has made it necessary to set a new baseline in 2019 to reflect the different emission profile created by the new product portfolio. We believe with a more recent and updated baseline PMI can be more incisive and transparent on the decarbonization journey in alignment with the recommendations from the Science Base Target initiative and better incorporating inputs from the models published by Intergovernmental Panel on Climate Change.

Scope 2 (location-based)

Base year start
January 1 2019

Base year end
December 31 2019

Base year emissions (metric tons CO2e)
447322

Comment
In 2020 we updated our baseline year, moving it from 2010 to 2019, to account for changes in our footprint and business model. The rapid expansion of smoke free products in our portfolio has made it necessary to set a new baseline in 2019 to reflect the different emission profile created by the new product portfolio. We believe with a more recent and updated baseline PMI can be more incisive and transparent on the decarbonization journey in alignment with the recommendations from the Science Base Target initiative and better incorporating inputs from the models published by Intergovernmental Panel on Climate Change. Scope 2 (market-based)

Scope 2 (market-based)

Base year start
January 1 2019

Base year end
December 31 2019

Base year emissions (metric tons CO2e)
158672

Comment
In 2020 we updated our baseline year, moving it from 2010 to 2019, to account for changes in our footprint and business model. The rapid expansion of smoke free products in our portfolio has made it necessary to set a new baseline in 2019 to reflect the different emission profile created by the new product portfolio. We believe with a more recent and updated baseline PMI can be more incisive and transparent on the decarbonization journey in alignment with the recommendations from the Science Base Target initiative and better incorporating inputs from the models published by Intergovernmental Panel on Climate Change.

Scope 3 category 1: Purchased goods and services

Base year start
January 1 2019

Base year end
December 31 2019

Base year emissions (metric tons CO2e)
3387076

Comment
Purchased goods and services includes:
a) product related purchased goods and services which contains two major subcategories: 1) tobacco, which is a key ingredient in PMI's products and accounts for the largest carbon footprint of all raw materials. For each kilogram of green tobacco purchased the value chain model calculates the emissions from all upstream associated emissions (e.g., agricultural practices, curing, processing in stemmeries, and upstream transport, etc.); and 2) other product related materials, e.g., filter, paper and packaging materials. PMI engages with suppliers to gather their materials' cradle-to-gate emissions factors, and their plans for further reductions. Where this is not possible, industry average emission factors are being used.
b) non-product related emissions which cover categories 1b includes emissions related for example to professional services, marketing activities, facility services & supplies among others and is mainly calculated using environmental extended input-output (EEIO) analysis, and GHG emissions factors that convert spend into GHG emissions.
2019 and 2020 data for this category has been restated in 2021 due to more accurate data in some direct materials categories.

Scope 3 category 2: Capital goods

Base year start
January 1 2019

Base year end
December 31 2019

Base year emissions (metric tons CO2e)
112701

Comment
This category includes emissions related to capital goods and is calculated using environmental extended input-output (EEIO) analysis, and GHG emissions factors that convert spend into GHG emissions.

Scope 3 category 3: Fuel-and-energy-related activities (not included in Scope 1 or 2)

Base year start
January 1 2019

Base year end
December 31 2019

Base year emissions (metric tons CO2e)
114704

Comment
These are GHG emissions associated with the production of fuels and energy purchased and consumed by PMI (category 3) and not included under scope 1 and 2. It is mainly calculated using activity data and emission factors from the UK's Department for Business, Energy & Industrial Strategy (BEIS).

Scope 3 category 4: Upstream transportation and distribution

Base year start
January 1 2019

Base year end
December 31 2019

Base year emissions (metric tons CO2e)
498897

Comment
The upstream transport and distribution of goods (category 4) includes emissions from all purchased inbound and outbound logistics, transport between PMI facilities, and warehousing.
Air and ocean transport emissions are mostly calculated by the carriers, based on their own consumption and itinerary data. Road and mixed transport emissions are calculated based on the volume of goods transported and the travelled distance where possible. When no other information is available, environmental extended input-output (EEIO) analysis is used, and GHG emissions factors that convert spend into GHG emissions.

Scope 3 category 5: Waste generated in operations

Base year start
January 1 2019

Base year end
December 31 2019

Base year emissions (metric tons CO2e)
3726

Comment
GHG emissions from waste (category 5) includes all emissions from the third-party disposal and treatment of waste generated by PMI's owned or controlled operations and are calculated based on the weight and type of waste and the treatment method, using the UK's Department for Business, Energy & Industrial Strategy (BEIS) emissions factors.

Scope 3 category 6: Business travel

Base year start
January 1 2019

Base year end
December 31 2019

Base year emissions (metric tons CO2e)
111283

Comment
PMI's employee business travel (category 6) is split into flights (calculated using primary flight data), hotel stays (calculated from the number of night stays), taxis (calculated from distance), and train (calculated from number of trips). Other business travel (which is very minimal) is not directly collected by PMI and therefore emissions are calculated based upon an expert assumption on the size of the emissions relative to PMI's air travel.

Scope 3 category 7: Employee commuting

Base year start
January 1 2019

Base year end
December 31 2019

Base year emissions (metric tons CO2e)
41561

Comment
PMI's employee commuting emissions (category 7) are calculated using headcount by country and commuting profiles related to each country's economic development and quality of public transport infrastructure. In this category, the optional impact of remote work is included.

Scope 3 category 8: Upstream leased assets

Base year start
January 1 2019

Base year end
December 31 2019

Base year emissions (metric tons CO2e)
0

Comment
PMI do lease some warehouse space from third parties with emissions that are not accounted for in scope 1 and 2. However, for this scope 3 model, this warehouse space is included within category 4 – upstream transportation and distribution. Therefore category 8 has been excluded to avoid double counting

Scope 3 category 9: Downstream transportation and distribution

Base year start
January 1 2019

Base year end
December 31 2019

Base year emissions (metric tons CO2e)
58841

Comment
The GHG emissions associated with the transportation and distribution of sold finished goods to retailers and end consumers that is not controlled and paid for by PMI (category 9) is calculated by defining profiles for a number of distribution channels (differing between transport mode, distances travelled, etc.) and allocating the percentage of distributed products between each of the distribution channels.

Scope 3 category 10: Processing of sold products

Base year start
January 1 2019

Base year end
December 31 2019

Base year emissions (metric tons CO2e)
0

Comment
PMI only sells final products to end-users, and no intermediate products which could be further processed, transformed or included into other products; therefore, this category has been excluded.

Scope 3 category 11: Use of sold products

Base year start
January 1 2019

Base year end
December 31 2019

Base year emissions (metric tons CO2e)
107409

Comment
The associated impact of consumer use of PMI's products (category 11) primarily comes from the electricity used in charging PMI's smoke free products, devices and emissions from lighters to light the cigarette. The use phase emissions are calculated using the International Energy Agency's (IEA) emissions factors for charging smoke free products devices in consumer countries / regions. In this category, the optional impact of indirect emissions from the use of lighters for combustible products like cigarettes, is being calculated based on sales values and emissions assumptions.

Scope 3 category 12: End of life treatment of sold products

Base year start
January 1 2019

Base year end
December 31 2019

Base year emissions (metric tons CO2e)
57817

Comment
For each product PMI sells, there are associated emissions in their end of life (category 12). Emission factors for the end-of-life treatment for combustible products and smoke-free products (consumables and devices) were taken from life cycle analyses (LCAs).

Scope 3 category 13: Downstream leased assets

Base year start
January 1 2019

Base year end
December 31 2019

Base year emissions (metric tons CO2e)
0

Comment
PMI does lease some office floor-space in certain offices around the world, but this has been confirmed as extremely small, and regarded as de minimis, therefore this category has been excluded.

Scope 3 category 14: Franchises

Base year start
January 1 2019

Base year end
December 31 2019

Base year emissions (metric tons CO2e)
0

Comment
There are currently no franchises emissions.

Scope 3 category 15: Investments

Base year start
January 1 2019

Base year end
December 31 2019

Base year emissions (metric tons CO2e)
0

Comment
Emissions associated with investments (category 15) were estimated based on each of the investee organizations (full value chain), allocating the emissions to PMI based on ownership share, and eliminating any double counting if the emissions are already reported elsewhere.
These emissions are currently excluded from the value chain inventory since their contribution to the PMI's scope 3 emissions is below the materiality threshold.

Scope 3: Other (upstream)

Base year start
January 1 2019

Base year end
December 31 2019

Base year emissions (metric tons CO2e)
0

Comment
There are currently no other (upstream) emissions.

Scope 3: Other (downstream)

Base year start
January 1 2019

Base year end
December 31 2019

Base year emissions (metric tons CO2e)
0

Comment
There are currently no other (downstream) emissions.

C5.3

(C5.3) Select the name of the standard, protocol, or methodology you have used to collect activity data and calculate emissions.
European Union Emission Trading System (EU ETS): The Monitoring and Reporting Regulation (MMR) – General guidance for installations
IEA CO2 Emissions from Fuel Combustion
ISO 14064-1
The Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard (Revised Edition)
Other, please specify (Ecoinvent to estimate the CO2 embedded in products in certain products within our value chain; Defra Voluntary 2020 Reporting Guidelines)

C6. Emissions data

C6.1

(C6.1) What were your organization's gross global Scope 1 emissions in metric tons CO2e?

Reporting year

Gross global Scope 1 emissions (metric tons CO2e)
308822

Start date
<Not Applicable>

End date
<Not Applicable>

Comment
Our scope 1 emissions correspond to manufacturing, offices, warehouses and sales fleet.

C6.2

(C6.2) Describe your organization's approach to reporting Scope 2 emissions.

Row 1

Scope 2, location-based
We are reporting a Scope 2, location-based figure

Scope 2, market-based
We are reporting a Scope 2, market-based figure

Comment
Our scope 2 emissions correspond to manufacturing, offices and warehouses emissions.

C6.3

(C6.3) What were your organization's gross global Scope 2 emissions in metric tons CO2e?

Reporting year

Scope 2, location-based
361315

Scope 2, market-based (if applicable)
64217

Start date
<Not Applicable>

End date
<Not Applicable>

Comment
Our scope 2 emissions correspond to manufacturing, offices and warehouses emissions.

C6.4

(C6.4) Are there any sources (e.g. facilities, specific GHGs, activities, geographies, etc.) of Scope 1 and Scope 2 emissions that are within your selected reporting boundary which are not included in your disclosure?
Yes

C6.4a

(C6.4a) Provide details of the sources of Scope 1 and Scope 2 emissions that are within your selected reporting boundary which are not included in your disclosure.

Source
Emissions from PMI operated IQOS stores

Relevance of Scope 1 emissions from this source
Emissions are not relevant

Relevance of location-based Scope 2 emissions from this source
Emissions are not relevant

Relevance of market-based Scope 2 emissions from this source (if applicable)
Emissions are not relevant

Explain why this source is excluded
As our IQOS stores activities are growing, we performed an analysis to estimate their emissions. These activities are performed by PMI entities (no Franchises). We based our calculation on the 2021 IQOS stores footprint (m2) and BEIS ND-NEED and DEFRA emissions factors. Our calculations indicated that theses emissions are standing for 0.5% of our 2021 Scope 1 and 2 emissions (<5% materiality level). Based on this, PMI understands that these business activities will remain in its watch list, though excluded from our inventory for the time being.

Estimated percentage of total Scope 1+2 emissions this excluded source represents
1

Explain how you estimated the percentage of emissions this excluded source represents
We based our calculation on the 2021 IQOS stores footprint (m2) and BEIS ND-NEED and DEFRA emissions factors.

Source
Emissions excluded due to a recent acquisition or merger

Relevance of Scope 1 emissions from this source
Emissions excluded due to a recent acquisition or merger

Relevance of location-based Scope 2 emissions from this source
Emissions excluded due to a recent acquisition or merger

Relevance of market-based Scope 2 emissions from this source (if applicable)
Emissions excluded due to a recent acquisition or merger

Explain why this source is excluded
The data and information in this submission do not incorporate wellness and healthcare acquisitions made by PMI during 2021 of Fertin Pharma A/S, Vectura Group plc., and OtiTopic, Inc., which together represented 0.3 percent of PMI's total reported net revenues in 2021. PMI anticipates this data to be fully included in our reporting by 2024.

Estimated percentage of total Scope 1+2 emissions this excluded source represents
<Not Applicable>

Explain how you estimated the percentage of emissions this excluded source represents
<Not Applicable>

C6.5

(C6.5) Account for your organization's gross global Scope 3 emissions, disclosing and explaining any exclusions.

Purchased goods and services

Evaluation status
Relevant, calculated

Emissions in reporting year (metric tons CO2e)
2701767

Emissions calculation methodology
Supplier-specific method
Hybrid method
Average data method
Spend-based method
Fuel-based method

Percentage of emissions calculated using data obtained from suppliers or value chain partners
62

Please explain
Includes emissions that are product-related (i.e., the materials purchased to make each product) and those emissions non-product-related (i.e., everything else, office stationery, advertising etc.). Closed to half of this category has been calculated using data received from our suppliers. The rest has been calculated based on material weights sourced or spending and specific emissions factors for each of the materials from international databases like BEIS (DEFRA) and Ecoinvent.

Capital goods

Evaluation status
Relevant, calculated

Emissions in reporting year (metric tons CO2e)
92896

Emissions calculation methodology
Average spend-based method

Percentage of emissions calculated using data obtained from suppliers or value chain partners
0

Please explain
Capital goods include emissions from goods that are used to manufacture/distribute PMI's products, or other office buildings and includes for example machinery, buildings or facilities.

Fuel-and-energy-related activities (not included in Scope 1 or 2)

Evaluation status
Relevant, calculated

Emissions in reporting year (metric tons CO2e)
95277

Emissions calculation methodology
Average data method

Percentage of emissions calculated using data obtained from suppliers or value chain partners
0

Please explain
This category includes the emissions related to the production of fuels and electricity consumed by PMI. i.e., for all fuel-related emissions calculated as its scope 1&2 emissions, such as associated emissions to extract gas, coal and oil, transport and process prior to combustion, and losses in supplying electricity. All these emissions are accounted for in this category.

Upstream transportation and distribution

Evaluation status
Relevant, calculated

Emissions in reporting year (metric tons CO2e)
593052

Emissions calculation methodology
Supplier-specific method
Hybrid method
Spend-based method
Distance-based method

Percentage of emissions calculated using data obtained from suppliers or value chain partners
22

Please explain
This category includes emissions from all purchased (non-owned) transport and distribution services. This includes inbound logistics, outbound logistics (i.e., sold products, if PMI has paid for/purchased the service) by land, sea and air freight, transport between PMI facilities and energy consumed in third party warehouses.

Waste generated in operations

Evaluation status
Relevant, calculated

Emissions in reporting year (metric tons CO2e)
4249

Emissions calculation methodology
Waste-type-specific method

Percentage of emissions calculated using data obtained from suppliers or value chain partners
0

Please explain
This category includes emissions from the third-party disposal and treatment of waste generated by PMI's owned or controlled operations.

Business travel

Evaluation status
Relevant, calculated

Emissions in reporting year (metric tons CO2e)
17406

Emissions calculation methodology
Supplier-specific method
Average data method
Distance-based method

Percentage of emissions calculated using data obtained from suppliers or value chain partners
72

Please explain
This category includes estimates of emissions from the transportation of employees for business-related activities in vehicles owned or operated by third parties. This includes emissions generated by employees travelling by air, road, rail and boat. It also includes the emissions due to stays in hotels.

Employee commuting

Evaluation status
Relevant, calculated

Emissions in reporting year (metric tons CO2e)
35547

Emissions calculation methodology
Average data method

Percentage of emissions calculated using data obtained from suppliers or value chain partners
0

Please explain
This category includes emissions arising from the transportation of employees between their homes and their worksites. Typically, this may include emissions from: automobile travel, bus travel, rail travel, air travel and other modes including subway, cycling and walking.

Upstream leased assets

Evaluation status
Not relevant, explanation provided

Emissions in reporting year (metric tons CO2e)
<Not Applicable>

Emissions calculation methodology
<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners
<Not Applicable>

Please explain
This category includes emissions from the operation of assets that are owned by other entities and leased to the reporting company (acting as a lessee) and are not already included in scope 1 and 2.
PMI does lease some warehouse space from third parties with emissions that are not accounted for in scope 1 and 2. However, this warehouse space is included within category 4 – upstream transportation and distribution. The GHG Protocol refers to transportation and distribution, and for PMI the warehouses are part of the distribution network, leading to its reporting combined with transportation. Therefore category 8 has been excluded to avoid double counting.

Downstream transportation and distribution

Evaluation status
Relevant, calculated

Emissions in reporting year (metric tons CO2e)
48492

Emissions calculation methodology
Distance-based method

Percentage of emissions calculated using data obtained from suppliers or value chain partners
0

Please explain
This category covers the transport of sold finished goods (FG) to the retailers and end-consumers. Transport relating to the end-consumer travelling to the retailer is generally not included under value chain or product footprinting standards.

PMI fleet transportation is included in Scope 1&2 emissions; therefore, only non-PMI fleet transport is included in this category. Any transport / storage of sold products paid for by PMI is included in category 4, and excluded from this category.

Therefore, all transport distances input for Category 9 calculations should exclude PMI-owned and operated transport (Scope 1 & 2) and any Third Party (TP) services procured by PMI (Category 4). Some transport legs will have a mixture of two or three of these types of transport services, but Category 9 emissions relate to transport of sold goods paid for by independent external parties only.

Processing of sold products

Evaluation status
Not relevant, explanation provided

Emissions in reporting year (metric tons CO2e)
<Not Applicable>

Emissions calculation methodology
<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners
<Not Applicable>

Please explain
This category includes customer's emissions relating to the processing of intermediate products sold by a reporting company, such as the conversion of aluminum ingots into aluminum injection molded products.

This category was reviewed in 2018 and it has been concluded that PMI sold only final products to end-users, and no intermediate products which could be further processed, transformed or included into other products, therefore this category has been excluded.

Use of sold products

Evaluation status
Relevant, calculated

Emissions in reporting year (metric tons CO2e)
105791

Emissions calculation methodology
Methodology for direct use phase emissions, please specify (The direct impact of consumer use of PMI's products (category 11) primarily comes from the electricity used in charging PMI's smoke free products)
Methodology for indirect use phase emissions, please specify (The indirect impact of consumer use of PMI's products (category 11) primarily comes from lighters to light the cigarette.)

Percentage of emissions calculated using data obtained from suppliers or value chain partners
21

Please explain
This category refers to emissions from the use of goods and services sold by PMI to end users, i.e., consumers that use these final products. Emissions from the P1 RRP product are predominantly caused by the electrical charging of the product. This category also includes emissions arising from the use of lighters with conventional cigarettes, cigars and Other Tobacco Products (OTP).

End of life treatment of sold products

Evaluation status
Relevant, calculated

Emissions in reporting year (metric tons CO2e)
54000

Emissions calculation methodology
Average data method

Percentage of emissions calculated using data obtained from suppliers or value chain partners
0

Please explain
This category refers to emissions from the waste disposal and treatment of products sold by PMI at the end of their life (EoL).

Downstream leased assets

Evaluation status
Not relevant, explanation provided

Emissions in reporting year (metric tons CO2e)
<Not Applicable>

Emissions calculation methodology
<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners
<Not Applicable>

Please explain
PMI does lease some office floor-space in certain offices around the world, but this has been confirmed as extremely small, and regarded as de minimis, therefore this category has been excluded.

Franchises

Evaluation status
Not relevant, explanation provided

Emissions in reporting year (metric tons CO2e)
<Not Applicable>

Emissions calculation methodology
<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners
<Not Applicable>

Please explain
Whilst PMI pays other entities to manufacture finished goods (accounted for in category 1a) from materials purchased by PMI (also accounted for in category 1a), as ownership of finished goods always returns to PMI, there are no examples of franchise operations to account for, therefore this category has been excluded.

Investments

Evaluation status
Not relevant, explanation provided

Emissions in reporting year (metric tons CO2e)
<Not Applicable>

Emissions calculation methodology
<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners
<Not Applicable>

Please explain
Emissions associated with investments were estimated based on each of the investee organizations (full value chain), allocating the emissions to PMI based on ownership share, and eliminating any double counting if the emissions are already reported elsewhere. These emissions are currently excluded from the value chain inventory since their contribution to the PMI's Scope 3 emissions is below the materiality threshold (<10%). Based on 2021 exercise emissions related to Investments represents around 1% of total scope 3 emissions.

Other (upstream)

Evaluation status
Not relevant, explanation provided

Emissions in reporting year (metric tons CO2e)
<Not Applicable>

Emissions calculation methodology
<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners
<Not Applicable>

Please explain
There are currently no other (upstream) emissions.

Other (downstream)

Evaluation status
Not relevant, explanation provided

Emissions in reporting year (metric tons CO2e)
<Not Applicable>

Emissions calculation methodology
<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners
<Not Applicable>

Please explain
There are currently no other (downstream) emissions.

C-AC6.8/C-FB6.8/C-PF6.8

(C-AC6.8/C-FB6.8/C-PF6.8) Is biogenic carbon pertaining to your direct operations relevant to your current CDP climate change disclosure?
Yes

C-AC6.8a/C-FB6.8a/C-PF6.8a

(C-AC6.8a/C-FB6.8a/C-PF6.8a) Account for biogenic carbon data pertaining to your direct operations and identify any exclusions.

CO2 emissions from biofuel combustion (processing/manufacturing machinery)

Emissions (metric tons CO2)
10704.6

Methodology
Default emissions factors

Please explain
These are biogenic emission for the consumption of biomass in our factories. The emission factor used come from DEFRA2021 database.

CO2 emissions from biofuel combustion (other)

Emissions (metric tons CO2)
910.05

Methodology
Default emissions factors

Please explain
These are biogenic emission for the consumption of biodiesel and bioethanol in our fleet. The emission factor used come from DEFRA2021 database.

C-AC6.9/C-FB6.9/C-PF6.9

(C-AC6.9/C-FB6.9/C-PF6.9) Do you collect or calculate greenhouse gas emissions for each commodity reported as significant to your business in C-AC0.7/FB0.7/PF0.7?

Agricultural commodities
Tobacco

Do you collect or calculate GHG emissions for this commodity?
Yes

Please explain
These emissions include those corresponding to agricultural practices and inputs such as seeding, fertilizing, curing fuels and crop protection agents and the logistics required to source tobacco from farms to our buying stations and from there to the stemmeries.

Agricultural commodities
Timber

Do you collect or calculate GHG emissions for this commodity?
Yes

Please explain
We collect and calculate emissions from curing fuels used for tobacco and other direct materials used in our manufacturing process like packaging, cigarette papers, acetate tow for filters, etc.

C-AC6.9a/C-FB6.9a/C-PF6.9a

(C-AC6.9a/C-FB6.9a/C-PF6.9a) Report your greenhouse gas emissions figure(s) for your disclosing commodity(ies), explain your methodology, and include any exclusions.

Timber

Reporting emissions by
Total

Emissions (metric tons CO2e)
819269

Denominator: unit of production
<Not Applicable>

Change from last reporting year
Lower

Please explain
In 2021, we accounted for 819,269 tCO2e of emissions from the timber in our supply chain. Around 90% of the emissions came from our timber-based materials supply chain (for example, direct materials used in packaging), while the remainder came from the timber-based curing fuels for our tobacco leaf supply chain. Related emissions were calculated using weight of materials purchased and/or used during reporting year and their suppliers' specific emission factors. Where this was not possible, industry average emission factors were used.
In 2021 timber related emissions decreased by 2% versus previous year. We achieved this by engaging with other direct materials suppliers using timber as raw material and inviting them to participate in our CDP supply chain; we collect primary data (e.g., emissions allocated) and collaborate with them to reduce carbon footprint. In the tobacco leaf supply chain, we could reduce the curing emissions related to timber materials by more than 65% from our 2019 baseline proving that the firewood used by our farmers is sustainable and therefore does not cause land use change or forest degradation, consequently lowering significantly the emissions for the whole process.

Tobacco

Reporting emissions by
Total

Emissions (metric tons CO2e)
804124

Denominator: unit of production
<Not Applicable>

Change from last reporting year
Lower

Please explain
In 2021, we reduced our emissions by 104,617 tCO2e in our tobacco supply chain. Our total emissions in the previous year were 908,741 tCO2e, resulting in a 12% decrease.
Total emissions for tobacco include all activities performed and inputs used by farmers and related to tobacco seedling production, fertilizers, pesticides, transport, mechanization and curing. Our Good Agricultural Practices (GAP) program promotes environmentally sustainable practices, including the elimination of highly hazardous pesticides, the promotion of bio-pesticides and the overall reduction of pesticide use, biodiversity management and reforestation, as well as water, soil, and waste management. A significant percentage of the total GHG emissions attributed to our tobacco purchases result from the curing process of Virginia flue-cured tobacco and emissions are related greatly to the unsustainable use of firewood for curing causing deforestation and being linked to land use change and the use of non-renewable fuel. With our Renewable Curing Fuel program, we have focused on minimizing the risk by supporting a sustainable firewood sourcing system validated by the application of an internal protocol and the shift from use of non-renewable fuel to biomass that is audited on a yearly basis by a third party. For 2021 all our Virginia flue cured tobacco suppliers were audited and assessed as fully compliant and the relative emissions that we calculated via our proprietary reporting system resulted in a further decrease from the previous years. Compared to our 2019 baseline, in 2021 we have reached 64% CO2e intensity reduction in emissions from curing. The efforts on the ground with our suppliers and the strong assurance process we carry out on a yearly basis allowed to validate that 100% of our standard flue cured tobacco in 2021 was purchased at no risk of deforestation of primary and protected forests bringing the risk for land use change related to tobacco curing to the minimum.

C6.10

(C6.10) Describe your gross global combined Scope 1 and 2 emissions for the reporting year in metric tons CO2e per unit currency total revenue and provide any additional intensity metrics that are appropriate to your business operations.

Intensity figure
0.0000118783

Metric numerator (Gross global combined Scope 1 and 2 emissions, metric tons CO2e)
373040

Metric denominator
unit total revenue

Metric denominator: Unit total
31405000000

Scope 2 figure used
Market-based

% change from previous year
17.47

Direction of change
Decreased

Reason for change
The decrease in our Scope 1 and 2 emissions in 2021 is a result of the reduction initiatives as reported in question C4.3b.
Namely the reasons for change are the decrease in absolute CO2e emissions by 9.7%% from 412,999 tons in 2020 to 373,040 tons in 2021, driven by nearly 150 carbon reduction activities in our manufacturing facilities including on-site renewable projects and energy efficiency projects. In 2021 more than 110 projects related to production

process efficiency were implemented across our manufacturing sites such as more efficient compressed air systems, process automation eliminating losses, waste heat recovery, etc. which yielded more than 7,000 tons of CO2 reduction per year; in addition to increased green electricity sourcing.

The term “net revenues” refers to operating revenues from the sale of our products, excluding excise taxes, and net of sales and promotion incentives. We believe that the most appropriate basis of disclosure is net revenue (as defined) and in line with CDP guidance.

Intensity figure
5.44

Metric numerator (Gross global combined Scope 1 and 2 emissions, metric tons CO2e)
373040

Metric denominator
full time equivalent (FTE) employee

Metric denominator: Unit total
68547

Scope 2 figure used
Market-based

% change from previous year
6.64

Direction of change
Decreased

Reason for change
The decrease in our Scope 1 and 2 emissions in 2021 is a result of the reduction initiatives as reported in question C4.3b.
The main reason for change is the decrease in absolute CO2e emissions by 9.7%from 412,999 tons in 2020 to 373,040 tons in 2021, mainly driven by carbon reduction activities in our manufacturing facilities (such as on-site renewable projects, energy efficiency projects and increased green electricity sourcing) and a 3% decrease of total number of employees to 68,547 which have a minimal impact in the calculation.

The intensity number is worked out from our 2021 CO2e emissions of 373,040 tons divided by 68,547 FTE employees. In 2020 we had 412,999 tons of CO2e emissions and 70,849 FTE employees.

Intensity figure
359.57

Metric numerator (Gross global combined Scope 1 and 2 emissions, metric tons CO2e)
267783

Metric denominator
Other, please specify (Combustible and smoke free-products shipment volume (in billion units))

Metric denominator: Unit total
744.74

Scope 2 figure used
Market-based

% change from previous year
14.03

Direction of change
Decreased

Reason for change
This covers Scope 1 and 2 emissions from our manufacturing facilities only. We decreased our CO2 intensity from 418kg CO2 per million cigarettes equivalent sold in 2020 to 359.57 kg CO2 per million cigarettes equivalent sold in 2021. This was driven by our Energy Management Program activities, and renewable energy projects and slightly declining production volumes. Moreover, our Drive 4 Zero program, which aims to eliminate economic losses caused by inefficient energy use. Under the program, we look for industrial and manufacturing solutions such as heat recovery and manufacturing-process optimization. We also promote behavioral change through our Zero Loss Mindset program.
To support our Drive 4 Zero program, an Energy Saving Initiatives (ESIs) program started in 2019, triggering more than 500 projects worldwide including among many others LED lighting, HVAC upgrade, chilled water optimization and heat recovery projects. The intensity number is worked out from our 2021 267,783 tCO2e emissions (for manufacturing) divided by 744.74 billion cigarettes equivalent sold volume. In 2020 we had 305,381 tons of CO2e emissions, and 730 billion cigarettes equivalent sold. The reduction of 14% is due to the Energy Saving Initiatives listed in section 4.3b, the increase in the purchased renewable electricity and the impact of COVID 19 pandemic that has been an important driver for 2020 & 2021 CO2 reduction performances.

C7. Emissions breakdowns

C7.1

(C7.1) Does your organization break down its Scope 1 emissions by greenhouse gas type?
Yes

C7.1a

(C7.1a) Break down your total gross global Scope 1 emissions by greenhouse gas type and provide the source of each used greenhouse warming potential (GWP).

Greenhouse gas	Scope 1 emissions (metric tons of CO2e)	GWP Reference
CO2	307644	IPCC Fourth Assessment Report (AR4 - 100 year)
CH4	403	IPCC Fourth Assessment Report (AR4 - 100 year)
N2O	775	IPCC Fourth Assessment Report (AR4 - 100 year)

C7.2

(C7.2) Break down your total gross global Scope 1 emissions by country/region.

Country/Region	Scope 1 emissions (metric tons CO2e)
Albania	94.77
Algeria	411.86
Argentina	7586.81
Armenia	123.75
Australia	432.92
Bangladesh	11.09
Bosnia & Herzegovina	99.81
Brazil	4396.5
Bulgaria	184.91
Canada	1593.19
Chile	33.8
China	47.96
Hong Kong SAR, China	36.67
China, Macao Special Administrative Region	0.33
Colombia	458.4
Costa Rica	510.81
Croatia	343.68
Czechia	3673.37
Denmark	168.34
Dominican Republic	816.55
Ecuador	679.54
Egypt	562.52
El Salvador	165.33
Finland	43.42
France	1208.93
Georgia	148.81
Germany	17183.09
Greece	7708.47
Guatemala	156.06
Hungary	903.84
India	40.29
Indonesia	33063.75
Italy	29774.76
Jamaica	3.22
Japan	3695.96
Jordan	357.28
Kazakhstan	3684.68
Kuwait	34.26
Lebanon	44.22
Malaysia	8403.1
Mexico	4103.26
Morocco	274.94
Netherlands	27976.17
Lithuania	1469.43
New Zealand	173.12
Nicaragua	99.34
Norway	17.07
Pakistan	4753.2
Panama	41.69
Paraguay	21.01
Peru	44.56
Philippines	21760.51
Poland	15518.62
Republic of Korea	6929.52
Republic of Moldova	78.74
Réunion	93.1
Romania	11378.26

Country/Region	Scope 1 emissions (metric tons CO2e)
Russian Federation	33273.69
Senegal	983.65
Serbia	4538.08
Singapore	227.35
Slovakia	341
Slovenia	78.42
South Africa	1062.07
Spain	909.05
Sweden	248.96
Switzerland	4076.03
Taiwan, China	178.39
North Macedonia	89.13
Thailand	941.45
Tunisia	164.44
Turkey	24189.12
Ukraine	4972.35
United Arab Emirates	508.14
United Kingdom of Great Britain and Northern Ireland	430.07
Uruguay	18.01
Venezuela (Bolivarian Republic of)	9.57
Viet Nam	201.38
Other, please specify (Rest of the world (where we do business))	1201.71
Israel	927.62
Portugal	5555.97
Nigeria	29.82
Aruba	13.29
Belgium	8.31
Curaçao	25.56

C7.3

(C7.3) Indicate which gross global Scope 1 emissions breakdowns you are able to provide.

By activity

C7.3c

(C7.3c) Break down your total gross global Scope 1 emissions by business activity.

Activity	Scope 1 emissions (metric tons CO2e)
Manufacturing	226626.22
Offices and Warehouses	4178.32
Vehicle Fleet	76816
Private Aircraft	1201.71

C-AC7.4/C-FB7.4/C-PF7.4

(C-AC7.4/C-FB7.4/C-PF7.4) Do you include emissions pertaining to your business activity(ies) in your direct operations as part of your global gross Scope 1 figure?

Yes

C-AC7.4b/C-FB7.4b/C-PF7.4b

(C-AC7.4b/C-FB7.4b/C-PF7.4b) Report the Scope 1 emissions pertaining to your business activity(ies) and explain any exclusions. If applicable, disaggregate your agricultural/forestry by GHG emissions category.

Activity
Processing/Manufacturing

Emissions category
<Not Applicable>

Emissions (metric tons CO2e)
226626.22

Methodology
Default emissions factor

Please explain
This category regroups all activities related to manufacturing
The emission factor used come from DEFRA2021 database.

Activity
Distribution

Emissions category
<Not Applicable>

Emissions (metric tons CO2e)
82196.03

Methodology
Default emissions factor

Please explain
This category regroups all activities related to distribution (including offices, warehouses and aircraft)
The emission factor used come from DEFRA2021 database.

C7.5

(C7.5) Break down your total gross global Scope 2 emissions by country/region.

Country/Region	Scope 2, location-based (metric tons CO2e)	Scope 2, market-based (metric tons CO2e)
Albania	31.89	31.89
Algeria	20.66	20.66
Argentina	7823.74	280.86
Armenia	7.4	7.4
Aruba	17.86	17.86
Australia	291.64	291.64
Austria	6.58	6.58
Lithuania	1639.25	38.03
Bangladesh	11.94	11.94
Netherlands	12353.25	0
Bosnia & Herzegovina	71.31	71.31
Brazil	1481.43	11.2
Bulgaria	65.7	65.7
Canada	2176.07	332.92
Chile	7.65	7.65
China	35.75	35.75
Colombia	209.3	209.3
Costa Rica	1.47	1.47
Croatia	32.79	0
Curaçao	23.6	23.6
Czechia	10258.55	90.56
Denmark	1.94	1.94
Dominican Republic	406.02	406.02
Ecuador	165.53	165.53
Egypt	45.69	45.69
El Salvador	6.41	6.41
Finland	1.51	1.51
France	11.57	11.57
Georgia	4.8	4.8
Germany	8034.06	409.1
Greece	12545.36	0
Guatemala	34.32	34.32
Hong Kong SAR, China	400.1	400.1
Hungary	55.41	55.41
India	80.07	80.07
Indonesia	74010.28	7527.87

Country/Region	Scope 2, location-based (metric tons CO2e)	Scope 2, market-based (metric tons CO2e)
Israel	224.53	224.53
Italy	19073.65	296.98
Jamaica	6.68	6.68
Japan	204.4	204.4
Jordan	1673.44	1673.44
Kazakhstan	6600.96	796.09
Republic of Korea	13805.89	62.69
Kuwait	36.28	36.28
Lebanon	43.7	43.7
China, Macao Special Administrative Region	1.99	1.99
Malaysia	3987.68	126.06
Mexico	11463.7	410.18
Republic of Moldova	17.53	17.53
Morocco	43.59	43.59
New Zealand	6.25	0
Nicaragua	15.06	15.06
Nigeria	8.56	8.56
Norway	0.58	0.58
Pakistan	2434.2	201.34
Panama	6.28	6.28
Paraguay	23.71	23.71
Peru	7.2	7.2
Philippines	33011.01	1888.41
Poland	46662.21	3809.32
Portugal	5258.5	0
Romania	10743.56	61.55
Senegal	2813.93	80.27
Serbia	15161.16	111.96
Singapore	1438.03	1438.03
Slovakia	8.12	8.12
Slovenia	157.96	139.54
South Africa	2741.71	218.21
Spain	71.18	71.18
Sweden	30.07	28.54
Switzerland	994.57	55.13
Thailand	68.89	68.89
Tunisia	16.48	16.48
Turkey	8852.7	305.34
Ukraine	7816.81	7816.81
United Arab Emirates	120.19	120.19
United Kingdom of Great Britain and Northern Ireland	205.45	205.45
Uruguay	0.29	0.29
United States of America	361.87	361.87
Viet Nam	30.12	30.12
Russian Federation	32119.66	32119.66
Taiwan, China	188.73	188.73
Venezuela (Bolivarian Republic of)	251.18	26.41
North Macedonia	39.92	39.92
Réunion	41.08	41.08
Belgium	52.4	52.4

C7.6

(C7.6) Indicate which gross global Scope 2 emissions breakdowns you are able to provide.

By activity

C7.6c

(C7.6c) Break down your total gross global Scope 2 emissions by business activity.

Activity	Scope 2, location-based (metric tons CO2e)	Scope 2, market-based (metric tons CO2e)
Manufacturing	336963.99	41156.81
Offices and Warehouses	24350.54	23060.58

C7.9

(C7.9) How do your gross global emissions (Scope 1 and 2 combined) for the reporting year compare to those of the previous reporting year?

Decreased

C7.9a

(C7.9a) Identify the reasons for any change in your gross global emissions (Scope 1 and 2 combined), and for each of them specify how your emissions compare to the previous year.

	Change in emissions (metric tons CO2e)	Direction of change	Emissions value (percentage)	Please explain calculation
Change in renewable energy consumption	26996	Decreased	6.54	The change in renewable energy consumption comes from the purchased renewable electricity in our manufacturing plants plus the produced renewable energy. Last year 26,996 tons of CO2 were reduced due to the change in renewable energy consumption. Our total Scope 1 and 2 emissions in the 2020 was 412,999 tCO2e, therefore a 6.54% reduction (26,996/412,999)*100 = 6.54%
Other emissions reduction activities	22832	Decreased	5.53	The 22,832 tCO2e reduction comes from the relentless drive of our energy saving and efficiency team implementing processes through our Drive for Zero program. Compared to our scope 1 and 2 in 2020, this represents a 5.53% reduction taking into consideration the increased energy demand from our Smoke-Free-Products (the process to manufacture heated tobacco units is more energy intensive than for conventional cigarettes, due to the production of the cast leaf tobacco in the magnitude of three times more energy than conventional products). Our total Scope 1 and 2 emissions in the 2020 was 412,999 tCO2e, therefore a 5.53% reduction (22,832/412,999)*100 = 5.53%
Divestment	0	No change	0	PMI did not have any changes due to change in divestment in 2021.
Acquisitions	0	No change	0	PMI did not have any changes due to change in acquisitions in 2021.
Mergers	0	No change	0	PMI did not have any changes due to change in mergers in 2021.
Change in output	9869	Increased	2.39	The main driver for this increase is driven by product portfolio impact (increase of our smoke free products, which process is more energy intensive than conventional cigarettes due to the production of cast leaf tobacco). It has been also impacted by the increase of km driven of our fleet. In 2021, 9,869 tCO2e increased in our scope 1 and 2, compared to a total of 412,999, therefore a 9,869/412,999*100 = 2.39% increase.
Change in methodology	0	No change	0	PMI did not have any changes due to change in methodology in 2021.
Change in boundary	0	No change	0	PMI did not have any changes due to change in boundary in 2021.
Change in physical operating conditions	0	No change	0	PMI did not have any changes due to change in physical operating in 2021.
Unidentified	0	No change	0	PMI did not have any changes due to change unidentified in 2021.
Other	0	No change	0	PMI did not have any changes due to change in other in 2021.

C7.9b

(C7.9b) Are your emissions performance calculations in C7.9 and C7.9a based on a location-based Scope 2 emissions figure or a market-based Scope 2 emissions figure?

Market-based

C8. Energy

C8.1

(C8.1) What percentage of your total operational spend in the reporting year was on energy?

More than 0% but less than or equal to 5%

C8.2

(C8.2) Select which energy-related activities your organization has undertaken.

	Indicate whether your organization undertook this energy-related activity in the reporting year
Consumption of fuel (excluding feedstocks)	Yes
Consumption of purchased or acquired electricity	Yes
Consumption of purchased or acquired heat	Yes
Consumption of purchased or acquired steam	No
Consumption of purchased or acquired cooling	No
Generation of electricity, heat, steam, or cooling	Yes

C8.2a

(C8.2a) Report your organization's energy consumption totals (excluding feedstocks) in MWh.

	Heating value	MWh from renewable sources	MWh from non-renewable sources	Total (renewable and non-renewable) MWh
Consumption of fuel (excluding feedstock)	LHV (lower heating value)	34175.83	1261589.26	1295765.09
Consumption of purchased or acquired electricity	<Not Applicable>	663106.18	146358.1	809464.28
Consumption of purchased or acquired heat	<Not Applicable>	0	27378.58	27378.58
Consumption of purchased or acquired steam	<Not Applicable>	<Not Applicable>	<Not Applicable>	<Not Applicable>
Consumption of purchased or acquired cooling	<Not Applicable>	<Not Applicable>	<Not Applicable>	<Not Applicable>
Consumption of self-generated non-fuel renewable energy	<Not Applicable>	12160.39	<Not Applicable>	12160.39
Total energy consumption	<Not Applicable>	709442.4	1435325.94	2144768.34

C8.2b

(C8.2b) Select the applications of your organization's consumption of fuel.

	Indicate whether your organization undertakes this fuel application
Consumption of fuel for the generation of electricity	Yes
Consumption of fuel for the generation of heat	Yes
Consumption of fuel for the generation of steam	Yes
Consumption of fuel for the generation of cooling	No
Consumption of fuel for co-generation or tri-generation	Yes

C8.2c

(C8.2c) State how much fuel in MWh your organization has consumed (excluding feedstocks) by fuel type.

Sustainable biomass

Heating value
LHV

Total fuel MWh consumed by the organization
19619.3

MWh fuel consumed for self-generation of electricity
0

MWh fuel consumed for self-generation of heat
0

MWh fuel consumed for self-generation of steam
19619.3

MWh fuel consumed for self-generation of cooling
<Not Applicable>

MWh fuel consumed for self- cogeneration or self-trigeneration
0

Comment
This includes sustainable biomass and agro-waste used in some factories supported by documentation/certification. For example: our factory in Lithuania is using biomass certified by FSC, while other factory is using agro-waste (i.e., sunflower husk).

Sustainability criteria is in line with PMI Monitoring Framework (MF) for Sustainable Leaf Curing Fuels developed in 2016. Following this internal standard, main requirements to be met are:
1. No Old Growth Forest cut
2. Renewable sources/Self-sufficient firewood
3. Full traceability.
Examples of documentation to evidence fulfilment of requirements mentioned above can be receipts of purchased fuels, including the name of the vendor and the amount of fuel purchased and a verification of the source of the fuel.

Other biomass

Heating value
LHV

Total fuel MWh consumed by the organization
11016.9

MWh fuel consumed for self-generation of electricity
0

MWh fuel consumed for self-generation of heat
119.8

MWh fuel consumed for self-generation of steam
10897.1

MWh fuel consumed for self-generation of cooling
<Not Applicable>

MWh fuel consumed for self- cogeneration or self-trigeneration
0

Comment
This refers to biomass in only one factory and one office.

Other renewable fuels (e.g. renewable hydrogen)

Heating value
LHV

Total fuel MWh consumed by the organization
3539.6

MWh fuel consumed for self-generation of electricity
0

MWh fuel consumed for self-generation of heat
3539.6

MWh fuel consumed for self-generation of steam
0

MWh fuel consumed for self-generation of cooling
<Not Applicable>

MWh fuel consumed for self- cogeneration or self-trigeneration
0

Comment
This mainly refers to bioethanol and biodiesel used for our fleet.

Coal

Heating value
LHV

Total fuel MWh consumed by the organization
288.4

MWh fuel consumed for self-generation of electricity
0

MWh fuel consumed for self-generation of heat
288.4

MWh fuel consumed for self-generation of steam
0

MWh fuel consumed for self-generation of cooling
<Not Applicable>

MWh fuel consumed for self- cogeneration or self-trigeneration
0

Comment
This refers to coal consumption in one market.

Oil

Heating value
LHV

Total fuel MWh consumed by the organization
323777.5

MWh fuel consumed for self-generation of electricity
17598.9

MWh fuel consumed for self-generation of heat
303895.6

MWh fuel consumed for self-generation of steam
2283

MWh fuel consumed for self-generation of cooling
<Not Applicable>

MWh fuel consumed for self- cogeneration or self-trigeneration
0

Comment
This includes fuel oil, diesel & petrol consumed in our direct operations.

Gas

Heating value
LHV

Total fuel MWh consumed by the organization
932916.7

MWh fuel consumed for self-generation of electricity
0

MWh fuel consumed for self-generation of heat
225846

MWh fuel consumed for self-generation of steam
539141.4

MWh fuel consumed for self-generation of cooling
<Not Applicable>

MWh fuel consumed for self- cogeneration or self-trigeneration
167929.3

Comment
This refers to natural gas and LPG consumed in our direct operations.

Other non-renewable fuels (e.g. non-renewable hydrogen)

Heating value
LHV

Total fuel MWh consumed by the organization
4606.7

MWh fuel consumed for self-generation of electricity
0

MWh fuel consumed for self-generation of heat
4606.7

MWh fuel consumed for self-generation of steam
0

MWh fuel consumed for self-generation of cooling
<Not Applicable>

MWh fuel consumed for self- cogeneration or self-trigeneration
0

Comment
This corresponds to aviation fuel.

Total fuel

Heating value
LHV

Total fuel MWh consumed by the organization
1295765.1

MWh fuel consumed for self-generation of electricity
17598.9

MWh fuel consumed for self-generation of heat
538296.1

MWh fuel consumed for self-generation of steam
571940.8

MWh fuel consumed for self-generation of cooling
<Not Applicable>

MWh fuel consumed for self- cogeneration or self-trigeneration
167929.3

Comment
This refers to the sum of all fuel consumed for reporting year 2021.

C8.2d

(C8.2d) Provide details on the electricity, heat, steam, and cooling your organization has generated and consumed in the reporting year.

	Total Gross generation (MWh)	Generation that is consumed by the organization (MWh)	Gross generation from renewable sources (MWh)	Generation from renewable sources that is consumed by the organization (MWh)
Electricity	73302.3	73301.09	11798.26	11797.05
Heat	200452.52	200452.52	319.74	319.74
Steam	503307.91	503307.91	26854.48	26854.48
Cooling	696139.28	696139.28	570479.92	570479.92

C8.2e

(C8.2e) Provide details on the electricity, heat, steam, and/or cooling amounts that were accounted for at a zero or near-zero emission factor in the market-based Scope 2 figure reported in C6.3.

Sourcing method
Green electricity products from an energy supplier (e.g. green tariffs)

Energy carrier
Electricity

Low-carbon technology type
Large hydropower (>25 MW)

Country/area of low-carbon energy consumption
Portugal

Tracking instrument used
GO

Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)
2621

Country/area of origin (generation) of the low-carbon energy or energy attribute
Norway

Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)
1982

Comment
Refers to our factory, offices and warehouses in Portugal.

Sourcing method
Green electricity products from an energy supplier (e.g. green tariffs)

Energy carrier
Electricity

Low-carbon technology type
Large hydropower (>25 MW)

Country/area of low-carbon energy consumption
Portugal

Tracking instrument used
GO

Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)
2484

Country/area of origin (generation) of the low-carbon energy or energy attribute
Norway

Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)
1953

Comment
Refers to our factory, offices and warehouses in Portugal.

Sourcing method
Green electricity products from an energy supplier (e.g. green tariffs)

Energy carrier
Electricity

Low-carbon technology type
Large hydropower (>25 MW)

Country/area of low-carbon energy consumption
Portugal

Tracking instrument used
GO

Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)
5

Country/area of origin (generation) of the low-carbon energy or energy attribute
Norway

Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)
1982

Comment
Refers to our factory, offices and warehouses in Portugal.

Sourcing method
Green electricity products from an energy supplier (e.g. green tariffs)

Energy carrier
Electricity

Low-carbon technology type
Large hydropower (>25 MW)

Country/area of low-carbon energy consumption
Portugal

Tracking instrument used
GO

Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)
2676

Country/area of origin (generation) of the low-carbon energy or energy attribute
Portugal

Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)
1976

Comment
Refers to our factory, offices and warehouses in Portugal.

Sourcing method
Green electricity products from an energy supplier (e.g. green tariffs)

Energy carrier
Electricity

Low-carbon technology type
Large hydropower (>25 MW)

Country/area of low-carbon energy consumption
Portugal

Tracking instrument used
GO

Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)
2225

Country/area of origin (generation) of the low-carbon energy or energy attribute
Portugal

Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)
1983

Comment
Refers to our factory, offices and warehouses in Portugal.

Sourcing method
Green electricity products from an energy supplier (e.g. green tariffs)

Energy carrier
Electricity

Low-carbon technology type
Large hydropower (>25 MW)

Country/area of low-carbon energy consumption
Portugal

Tracking instrument used
GO

Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)
6

Country/area of origin (generation) of the low-carbon energy or energy attribute
Switzerland

Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)
1909

Comment
Refers to our factory, offices and warehouses in Portugal.

Sourcing method
Green electricity products from an energy supplier (e.g. green tariffs)

Energy carrier
Electricity

Low-carbon technology type
Large hydropower (>25 MW)

Country/area of low-carbon energy consumption
Portugal

Tracking instrument used
GO

Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)
596

Country/area of origin (generation) of the low-carbon energy or energy attribute
Switzerland

Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)
1958

Comment
Refers to our factory, offices and warehouses in Portugal.

Sourcing method
Green electricity products from an energy supplier (e.g. green tariffs)

Energy carrier
Electricity

Low-carbon technology type
Large hydropower (>25 MW)

Country/area of low-carbon energy consumption
Portugal

Tracking instrument used
GO

Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)
6

Country/area of origin (generation) of the low-carbon energy or energy attribute
Switzerland

Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)
1976

Comment
Refers to our factory, offices and warehouses in Portugal.

Sourcing method
Green electricity products from an energy supplier (e.g. green tariffs)

Energy carrier
Electricity

Low-carbon technology type
Small hydropower (<25 MW)

Country/area of low-carbon energy consumption
Portugal

Tracking instrument used
GO

Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)
100

Country/area of origin (generation) of the low-carbon energy or energy attribute
Portugal

Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)
1993

Comment
Refers to our factory, offices and warehouses in Portugal.

Sourcing method
Green electricity products from an energy supplier (e.g. green tariffs)

Energy carrier
Electricity

Low-carbon technology type
Small hydropower (<25 MW)

Country/area of low-carbon energy consumption
Portugal

Tracking instrument used
GO

Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)
81

Country/area of origin (generation) of the low-carbon energy or energy attribute
Portugal

Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)
1996

Comment
Refers to our factory, offices and warehouses in Portugal.

Sourcing method
Green electricity products from an energy supplier (e.g. green tariffs)

Energy carrier
Electricity

Low-carbon technology type
Small hydropower (<25 MW)

Country/area of low-carbon energy consumption
Portugal

Tracking instrument used
GO

Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)
26

Country/area of origin (generation) of the low-carbon energy or energy attribute
Portugal

Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)
2001

Comment
Refers to our factory, offices and warehouses in Portugal.

Sourcing method
Green electricity products from an energy supplier (e.g. green tariffs)

Energy carrier
Electricity

Low-carbon technology type
Small hydropower (<25 MW)

Country/area of low-carbon energy consumption
Portugal

Tracking instrument used
GO

Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)
3

Country/area of origin (generation) of the low-carbon energy or energy attribute
Portugal

Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)
2004

Comment
Refers to our factory, offices and warehouses in Portugal.

Sourcing method
Green electricity products from an energy supplier (e.g. green tariffs)

Energy carrier
Electricity

Low-carbon technology type
Small hydropower (<25 MW)

Country/area of low-carbon energy consumption
Portugal

Tracking instrument used
GO

Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)
7

Country/area of origin (generation) of the low-carbon energy or energy attribute
Portugal

Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)
2006

Comment
Refers to our factory, offices and warehouses in Portugal.

Sourcing method
Green electricity products from an energy supplier (e.g. green tariffs)

Energy carrier
Electricity

Low-carbon technology type
Small hydropower (<25 MW)

Country/area of low-carbon energy consumption
Portugal

Tracking instrument used
GO

Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)
4

Country/area of origin (generation) of the low-carbon energy or energy attribute
Spain

Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)
1923

Comment
Refers to our factory, offices and warehouses in Portugal.

Sourcing method
Green electricity products from an energy supplier (e.g. green tariffs)

Energy carrier
Electricity

Low-carbon technology type
Small hydropower (<25 MW)

Country/area of low-carbon energy consumption
Portugal

Tracking instrument used
GO

Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)
5

Country/area of origin (generation) of the low-carbon energy or energy attribute
Spain

Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)
1965

Comment
Refers to our factory, offices and warehouses in Portugal.

Sourcing method
Green electricity products from an energy supplier (e.g. green tariffs)

Energy carrier
Electricity

Low-carbon technology type
Small hydropower (<25 MW)

Country/area of low-carbon energy consumption
Portugal

Tracking instrument used
GO

Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)
185

Country/area of origin (generation) of the low-carbon energy or energy attribute
Spain

Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)
1981

Comment
Refers to our factory, offices and warehouses in Portugal.

Sourcing method
Green electricity products from an energy supplier (e.g. green tariffs)

Energy carrier
Electricity

Low-carbon technology type
Small hydropower (<25 MW)

Country/area of low-carbon energy consumption
Portugal

Tracking instrument used
GO

Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)
1

Country/area of origin (generation) of the low-carbon energy or energy attribute
Spain

Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)
1984

Comment
Refers to our factory, offices and warehouses in Portugal.

Sourcing method
Green electricity products from an energy supplier (e.g. green tariffs)

Energy carrier
Electricity

Low-carbon technology type
Small hydropower (<25 MW)

Country/area of low-carbon energy consumption
Portugal

Tracking instrument used
GO

Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)
18

Country/area of origin (generation) of the low-carbon energy or energy attribute
Spain

Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)
1986

Comment
Refers to our factory, offices and warehouses in Portugal.

Sourcing method
Green electricity products from an energy supplier (e.g. green tariffs)

Energy carrier
Electricity

Low-carbon technology type
Small hydropower (<25 MW)

Country/area of low-carbon energy consumption
Portugal

Tracking instrument used
GO

Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)
4

Country/area of origin (generation) of the low-carbon energy or energy attribute
Spain

Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)
1996

Comment
Refers to our factory, offices and warehouses in Portugal.

Sourcing method
Green electricity products from an energy supplier (e.g. green tariffs)

Energy carrier
Electricity

Low-carbon technology type
Small hydropower (<25 MW)

Country/area of low-carbon energy consumption
Portugal

Tracking instrument used
GO

Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)
297

Country/area of origin (generation) of the low-carbon energy or energy attribute
Switzerland

Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)
1958

Comment
Refers to our factory, offices and warehouses in Portugal.

Sourcing method
Green electricity products from an energy supplier (e.g. green tariffs)

Energy carrier
Electricity

Low-carbon technology type
Small hydropower (<25 MW)

Country/area of low-carbon energy consumption
Portugal

Tracking instrument used
GO

Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)
30

Country/area of origin (generation) of the low-carbon energy or energy attribute
Switzerland

Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)
1959

Comment
Refers to our factory, offices and warehouses in Portugal.

Sourcing method
Green electricity products from an energy supplier (e.g. green tariffs)

Energy carrier
Electricity

Low-carbon technology type
Small hydropower (<25 MW)

Country/area of low-carbon energy consumption
Portugal

Tracking instrument used
GO

Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)
6

Country/area of origin (generation) of the low-carbon energy or energy attribute
Switzerland

Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)
1990

Comment
Refers to our factory, offices and warehouses in Portugal.

Sourcing method
Green electricity products from an energy supplier (e.g. green tariffs)

Energy carrier
Electricity

Low-carbon technology type
Small hydropower (<25 MW)

Country/area of low-carbon energy consumption
Portugal

Tracking instrument used
GO

Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)
147

Country/area of origin (generation) of the low-carbon energy or energy attribute
Switzerland

Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)
1994

Comment
Refers to our factory, offices and warehouses in Portugal.

Sourcing method
Green electricity products from an energy supplier (e.g. green tariffs)

Energy carrier
Electricity

Low-carbon technology type
Small hydropower (<25 MW)

Country/area of low-carbon energy consumption
Portugal

Tracking instrument used
GO

Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)
21

Country/area of origin (generation) of the low-carbon energy or energy attribute
Switzerland

Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)
1995

Comment
Refers to our factory, offices and warehouses in Portugal.

Sourcing method
Green electricity products from an energy supplier (e.g. green tariffs)

Energy carrier
Electricity

Low-carbon technology type
Small hydropower (<25 MW)

Country/area of low-carbon energy consumption
Portugal

Tracking instrument used
GO

Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)
114

Country/area of origin (generation) of the low-carbon energy or energy attribute
Switzerland

Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)
2001

Comment
Refers to our factory, offices and warehouses in Portugal.

Sourcing method
Green electricity products from an energy supplier (e.g. green tariffs)

Energy carrier
Electricity

Low-carbon technology type
Small hydropower (<25 MW)

Country/area of low-carbon energy consumption
Portugal

Tracking instrument used
GO

Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)
64

Country/area of origin (generation) of the low-carbon energy or energy attribute
Switzerland

Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)
2004

Comment
Refers to our factory, offices and warehouses in Portugal.

Sourcing method
Green electricity products from an energy supplier (e.g. green tariffs)

Energy carrier
Electricity

Low-carbon technology type
Small hydropower (<25 MW)

Country/area of low-carbon energy consumption
Portugal

Tracking instrument used
GO

Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)
96

Country/area of origin (generation) of the low-carbon energy or energy attribute
Switzerland

Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)
2005

Comment
Refers to our factory, offices and warehouses in Portugal.

Sourcing method
Green electricity products from an energy supplier (e.g. green tariffs)

Energy carrier
Electricity

Low-carbon technology type
Solar

Country/area of low-carbon energy consumption
Portugal

Tracking instrument used
GO

Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)
5

Country/area of origin (generation) of the low-carbon energy or energy attribute
Portugal

Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)
2014

Comment
Refers to our factory, offices and warehouses in Portugal.

Sourcing method
Green electricity products from an energy supplier (e.g. green tariffs)

Energy carrier
Electricity

Low-carbon technology type
Wind

Country/area of low-carbon energy consumption
Portugal

Tracking instrument used
GO

Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)
1

Country/area of origin (generation) of the low-carbon energy or energy attribute
Portugal

Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)
1999

Comment
Refers to our factory, offices and warehouses in Portugal.

Sourcing method
Green electricity products from an energy supplier (e.g. green tariffs)

Energy carrier
Electricity

Low-carbon technology type
Wind

Country/area of low-carbon energy consumption
Portugal

Tracking instrument used
GO

Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)
276

Country/area of origin (generation) of the low-carbon energy or energy attribute
Portugal

Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)
2006

Comment
Refers to our factory, offices and warehouses in Portugal.

Sourcing method
Green electricity products from an energy supplier (e.g. green tariffs)

Energy carrier
Electricity

Low-carbon technology type
Wind

Country/area of low-carbon energy consumption
Portugal

Tracking instrument used
GO

Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)
42

Country/area of origin (generation) of the low-carbon energy or energy attribute
Portugal

Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)
2008

Comment
Refers to our factory, offices and warehouses in Portugal.

Sourcing method
Green electricity products from an energy supplier (e.g. green tariffs)

Energy carrier
Electricity

Low-carbon technology type
Wind

Country/area of low-carbon energy consumption
Portugal

Tracking instrument used
GO

Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)
1461

Country/area of origin (generation) of the low-carbon energy or energy attribute
Portugal

Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)
2010

Comment
Refers to our factory, offices and warehouses in Portugal.

Sourcing method
Green electricity products from an energy supplier (e.g. green tariffs)

Energy carrier
Electricity

Low-carbon technology type
Wind

Country/area of low-carbon energy consumption
Portugal

Tracking instrument used
GO

Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)
255

Country/area of origin (generation) of the low-carbon energy or energy attribute
Portugal

Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)
2019

Comment
Refers to our factory, offices and warehouses in Portugal.

Sourcing method
Green electricity products from an energy supplier (e.g. green tariffs)

Energy carrier
Electricity

Low-carbon technology type
Wind

Country/area of low-carbon energy consumption
Portugal

Tracking instrument used
GO

Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)
4094

Country/area of origin (generation) of the low-carbon energy or energy attribute
Spain

Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)
1998

Comment
Refers to our factory, offices and warehouses in Portugal.

Sourcing method
Green electricity products from an energy supplier (e.g. green tariffs)

Energy carrier
Electricity

Low-carbon technology type
Sustainable biomass

Country/area of low-carbon energy consumption
Portugal

Tracking instrument used
GO

Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)
7

Country/area of origin (generation) of the low-carbon energy or energy attribute
Germany

Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)
1979

Comment
Refers to our factory, offices and warehouses in Portugal.

Sourcing method
Green electricity products from an energy supplier (e.g. green tariffs)

Energy carrier
Electricity

Low-carbon technology type
Sustainable biomass

Country/area of low-carbon energy consumption
Portugal

Tracking instrument used
GO

Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)
2865

Country/area of origin (generation) of the low-carbon energy or energy attribute
Portugal

Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)
2009

Comment
Refers to our factory, offices and warehouses in Portugal.

Sourcing method
Green electricity products from an energy supplier (e.g. green tariffs)

Energy carrier
Electricity

Low-carbon technology type
Sustainable biomass

Country/area of low-carbon energy consumption
Portugal

Tracking instrument used
GO

Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)
291

Country/area of origin (generation) of the low-carbon energy or energy attribute
Portugal

Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)
2011

Comment
Refers to our factory, offices and warehouses in Portugal.

Sourcing method
Green electricity products from an energy supplier (e.g. green tariffs)

Energy carrier
Electricity

Low-carbon technology type
Sustainable biomass

Country/area of low-carbon energy consumption
Portugal

Tracking instrument used
GO

Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)
7

Country/area of origin (generation) of the low-carbon energy or energy attribute
Portugal

Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)
2014

Comment
Refers to our factory, offices and warehouses in Portugal.

Sourcing method
Green electricity products from an energy supplier (e.g. green tariffs)

Energy carrier
Electricity

Low-carbon technology type
Sustainable biomass

Country/area of low-carbon energy consumption
Portugal

Tracking instrument used
GO

Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)
256

Country/area of origin (generation) of the low-carbon energy or energy attribute
Portugal

Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)
2018

Comment
Refers to our factory, offices and warehouses in Portugal.

Sourcing method
Unbundled energy attribute certificates (EACs) purchase

Energy carrier
Electricity

Low-carbon technology type
Large hydropower (>25 MW)

Country/area of low-carbon energy consumption
Indonesia

Tracking instrument used
I-REC

Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)
86759

Country/area of origin (generation) of the low-carbon energy or energy attribute
Indonesia

Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)
1991

Comment
Refers to our factories in Indonesia.

Sourcing method
Unbundled energy attribute certificates (EACs) purchase

Energy carrier
Electricity

Low-carbon technology type
Wind

Country/area of low-carbon energy consumption
Mexico

Tracking instrument used
I-REC

Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)
12678

Country/area of origin (generation) of the low-carbon energy or energy attribute
Mexico

Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)
2013

Comment
Refers to our factory in Mexico.

Sourcing method
Unbundled energy attribute certificates (EACs) purchase

Energy carrier
Electricity

Low-carbon technology type
Wind

Country/area of low-carbon energy consumption
Mexico

Tracking instrument used
I-REC

Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)
14953

Country/area of origin (generation) of the low-carbon energy or energy attribute
Mexico

Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)
2015

Comment
Refers to our factory in Mexico.

Sourcing method
Green electricity products from an energy supplier (e.g. green tariffs)

Energy carrier
Electricity

Low-carbon technology type
Large hydropower (>25 MW)

Country/area of low-carbon energy consumption
Serbia

Tracking instrument used
GO

Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)
20201

Country/area of origin (generation) of the low-carbon energy or energy attribute
Serbia

Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)
1970

Comment
Refers to our factory in Serbia.

Sourcing method
Green electricity products from an energy supplier (e.g. green tariffs)

Energy carrier
Electricity

Low-carbon technology type
Hydropower (capacity unknown)

Country/area of low-carbon energy consumption
Turkey

Tracking instrument used
GO

Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)
3948

Country/area of origin (generation) of the low-carbon energy or energy attribute
Turkey

Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)
1992

Comment
Refers to our factory in Turkey.

Sourcing method
Green electricity products from an energy supplier (e.g. green tariffs)

Energy carrier
Electricity

Low-carbon technology type
Hydropower (capacity unknown)

Country/area of low-carbon energy consumption
Turkey

Tracking instrument used
GO

Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)
15788

Country/area of origin (generation) of the low-carbon energy or energy attribute
Turkey

Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)
2012

Comment
Refers to our factory in Turkey.

Sourcing method
Unbundled energy attribute certificates (EACs) purchase

Energy carrier
Electricity

Low-carbon technology type
Wind

Country/area of low-carbon energy consumption
Argentina

Tracking instrument used
I-REC

Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)
26191

Country/area of origin (generation) of the low-carbon energy or energy attribute
Chile

Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)

Comment
Refers to our factories in Argentina.

Sourcing method
Unbundled energy attribute certificates (EACs) purchase

Energy carrier
Electricity

Low-carbon technology type
Hydropower (capacity unknown)

Country/area of low-carbon energy consumption
Brazil

Tracking instrument used
I-REC

Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)
14083

Country/area of origin (generation) of the low-carbon energy or energy attribute
Brazil

Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)
2007

Comment
Refers to our factory in Brazil.

Sourcing method
Green electricity products from an energy supplier (e.g. green tariffs)

Energy carrier
Electricity

Low-carbon technology type
Large hydropower (>25 MW)

Country/area of low-carbon energy consumption
Canada

Tracking instrument used
GO

Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)
14199.9

Country/area of origin (generation) of the low-carbon energy or energy attribute
Canada

Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)

Comment
Refers to our factory in Canada.

Sourcing method
Unbundled energy attribute certificates (EACs) purchase

Energy carrier
Electricity

Low-carbon technology type

Hydropower (capacity unknown)

Country/area of low-carbon energy consumption
Germany

Tracking instrument used
GO

Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)
22615

Country/area of origin (generation) of the low-carbon energy or energy attribute
Norway

Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)

Comment
Refers to our factories in Germany.

Sourcing method
Green electricity products from an energy supplier (e.g. green tariffs)

Energy carrier
Electricity

Low-carbon technology type
Hydropower (capacity unknown)

Country/area of low-carbon energy consumption
Italy

Tracking instrument used
GO

Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)
691

Country/area of origin (generation) of the low-carbon energy or energy attribute
Italy

Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)

Comment
Refers to our factories in Italy.

Sourcing method
Green electricity products from an energy supplier (e.g. green tariffs)

Energy carrier
Electricity

Low-carbon technology type
Solar

Country/area of low-carbon energy consumption
Italy

Tracking instrument used
GO

Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)
64074

Country/area of origin (generation) of the low-carbon energy or energy attribute
Italy

Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)

Comment
Refers to our factories in Italy.

Sourcing method
Green electricity products from an energy supplier (e.g. green tariffs)

Energy carrier
Electricity

Low-carbon technology type
Sustainable biomass

Country/area of low-carbon energy consumption
Italy

Tracking instrument used
GO

Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)
865

Country/area of origin (generation) of the low-carbon energy or energy attribute

Italy

Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)

Comment
Refers to our factories in Italy.

Sourcing method
Unbundled energy attribute certificates (EACs) purchase

Energy carrier
Electricity

Low-carbon technology type
Hydropower (capacity unknown)

Country/area of low-carbon energy consumption
Kazakhstan

Tracking instrument used
I-REC

Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)
9751

Country/area of origin (generation) of the low-carbon energy or energy attribute
China

Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)

Comment
Refers to our factory in Kazakhstan.

Sourcing method
Unbundled energy attribute certificates (EACs) purchase

Energy carrier
Electricity

Low-carbon technology type
Large hydropower (>25 MW)

Country/area of low-carbon energy consumption
Republic of Korea

Tracking instrument used
I-REC

Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)
26567

Country/area of origin (generation) of the low-carbon energy or energy attribute
China

Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)
2006

Comment
Refers to our factory in Republic of Korea.

Sourcing method
Unbundled energy attribute certificates (EACs) purchase

Energy carrier
Electricity

Low-carbon technology type
Sustainable biomass

Country/area of low-carbon energy consumption
Malaysia

Tracking instrument used
I-REC

Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)
9693

Country/area of origin (generation) of the low-carbon energy or energy attribute
Malaysia

Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)

Comment
Refers to our factory in Malaysia.

Sourcing method
Green electricity products from an energy supplier (e.g. green tariffs)

Energy carrier
Electricity

Low-carbon technology type
Hydropower (capacity unknown)

Country/area of low-carbon energy consumption
Netherlands

Tracking instrument used
GO

Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)
33424

Country/area of origin (generation) of the low-carbon energy or energy attribute
Sweden

Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)

Comment
Refers to our factory in Netherlands.

Sourcing method
Unbundled energy attribute certificates (EACs) purchase

Energy carrier
Electricity

Low-carbon technology type
Hydropower (capacity unknown)

Country/area of low-carbon energy consumption
Pakistan

Tracking instrument used
I-REC

Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)
6365

Country/area of origin (generation) of the low-carbon energy or energy attribute
India

Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)

Comment
Refers to our factories in Pakistan.

Sourcing method
Unbundled energy attribute certificates (EACs) purchase

Energy carrier
Electricity

Low-carbon technology type
Geothermal

Country/area of low-carbon energy consumption
Philippines

Tracking instrument used
I-REC

Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)
46401

Country/area of origin (generation) of the low-carbon energy or energy attribute
Philippines

Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)

Comment
Refers to our factories in Philippines.

Sourcing method
Unbundled energy attribute certificates (EACs) purchase

Energy carrier
Electricity

Low-carbon technology type
Hydropower (capacity unknown)

Country/area of low-carbon energy consumption
Poland

Tracking instrument used
GO

Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)
66253

Country/area of origin (generation) of the low-carbon energy or energy attribute
Norway

Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)

Comment
Refers to our factory in Poland.

Sourcing method
Unbundled energy attribute certificates (EACs) purchase

Energy carrier
Electricity

Low-carbon technology type
Hydropower (capacity unknown)

Country/area of low-carbon energy consumption
Romania

Tracking instrument used
GO

Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)
30948

Country/area of origin (generation) of the low-carbon energy or energy attribute
Norway

Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)

Comment
Refers to our factory in Romania.

Sourcing method
Green electricity products from an energy supplier (e.g. green tariffs)

Energy carrier
Electricity

Low-carbon technology type
Hydropower (capacity unknown)

Country/area of low-carbon energy consumption
Switzerland

Tracking instrument used
GO

Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)
37402.3

Country/area of origin (generation) of the low-carbon energy or energy attribute
Switzerland

Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)

Comment
This refers to our factory, offices and data center in Switzerland.

Sourcing method
Unbundled energy attribute certificates (EACs) purchase

Energy carrier
Electricity

Low-carbon technology type
Solar

Country/area of low-carbon energy consumption
Senegal

Tracking instrument used
I-REC

Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)
3566

Country/area of origin (generation) of the low-carbon energy or energy attribute
South Africa

Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)

Comment
Refers to our factory in Senegal.

Sourcing method

Unbundled energy attribute certificates (EACs) purchase

Energy carrier
Electricity

Low-carbon technology type
Solar

Country/area of low-carbon energy consumption
South Africa

Tracking instrument used
I-REC

Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)
2665

Country/area of origin (generation) of the low-carbon energy or energy attribute
South Africa

Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)

Comment
Refers to our factory in South Africa.

Sourcing method
Unbundled energy attribute certificates (EACs) purchase

Energy carrier
Electricity

Low-carbon technology type
Hydropower (capacity unknown)

Country/area of low-carbon energy consumption
Venezuela (Bolivarian Republic of)

Tracking instrument used
I-REC

Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)
715

Country/area of origin (generation) of the low-carbon energy or energy attribute
Brazil

Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)

Comment
Refers to our factory in Venezuela.

Sourcing method
Green electricity products from an energy supplier (e.g. green tariffs)

Energy carrier
Electricity

Low-carbon technology type
Large hydropower (>25 MW)

Country/area of low-carbon energy consumption
Lithuania

Tracking instrument used
GO

Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)
3755

Country/area of origin (generation) of the low-carbon energy or energy attribute
Bulgaria

Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)
1973

Comment
Refers to our factory in Lithuania.

Sourcing method
Green electricity products from an energy supplier (e.g. green tariffs)

Energy carrier
Electricity

Low-carbon technology type
Large hydropower (>25 MW)

Country/area of low-carbon energy consumption
Lithuania

Tracking instrument used
GO

Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)
2241

Country/area of origin (generation) of the low-carbon energy or energy attribute
Finland

Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)
1965

Comment
Refers to our factory in Lithuania.

Sourcing method
Green electricity products from an energy supplier (e.g. green tariffs)

Energy carrier
Electricity

Low-carbon technology type
Large hydropower (>25 MW)

Country/area of low-carbon energy consumption
Lithuania

Tracking instrument used
GO

Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)
1694

Country/area of origin (generation) of the low-carbon energy or energy attribute
Greece

Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)
2018

Comment
Refers to our factory in Lithuania.

Sourcing method
Green electricity products from an energy supplier (e.g. green tariffs)

Energy carrier
Electricity

Low-carbon technology type
Large hydropower (>25 MW)

Country/area of low-carbon energy consumption
Lithuania

Tracking instrument used
GO

Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)
2177

Country/area of origin (generation) of the low-carbon energy or energy attribute
Norway

Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)
1955

Comment
Refers to our factory in Lithuania.

Sourcing method
Green electricity products from an energy supplier (e.g. green tariffs)

Energy carrier
Electricity

Low-carbon technology type
Large hydropower (>25 MW)

Country/area of low-carbon energy consumption
Lithuania

Tracking instrument used
GO

Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)
419

Country/area of origin (generation) of the low-carbon energy or energy attribute
Norway

Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)
1968

Comment
Refers to our factory in Lithuania.

Sourcing method
Green electricity products from an energy supplier (e.g. green tariffs)

Energy carrier
Electricity

Low-carbon technology type
Large hydropower (>25 MW)

Country/area of low-carbon energy consumption
Lithuania

Tracking instrument used
GO

Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)
2129

Country/area of origin (generation) of the low-carbon energy or energy attribute
Norway

Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)
1974

Comment
Refers to our factory in Lithuania.

Sourcing method
Green electricity products from an energy supplier (e.g. green tariffs)

Energy carrier
Electricity

Low-carbon technology type
Large hydropower (>25 MW)

Country/area of low-carbon energy consumption
Lithuania

Tracking instrument used
GO

Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)
38

Country/area of origin (generation) of the low-carbon energy or energy attribute
Norway

Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)
1980

Comment
Refers to our factory in Lithuania.

Sourcing method
Green electricity products from an energy supplier (e.g. green tariffs)

Energy carrier
Electricity

Low-carbon technology type
Large hydropower (>25 MW)

Country/area of low-carbon energy consumption
Lithuania

Tracking instrument used
GO

Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)
43

Country/area of origin (generation) of the low-carbon energy or energy attribute
Norway

Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)
2010

Comment
Refers to our factory in Lithuania.

Sourcing method
Green electricity products from an energy supplier (e.g. green tariffs)

Energy carrier
Electricity

Low-carbon technology type
Large hydropower (>25 MW)

Country/area of low-carbon energy consumption
Lithuania

Tracking instrument used
GO

Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)
1503

Country/area of origin (generation) of the low-carbon energy or energy attribute
Sweden

Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)
1963

Comment
Refers to our factory in Lithuania.

Sourcing method
Green electricity products from an energy supplier (e.g. green tariffs)

Energy carrier
Electricity

Low-carbon technology type
Wind

Country/area of low-carbon energy consumption
Lithuania

Tracking instrument used
GO

Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)
2086

Country/area of origin (generation) of the low-carbon energy or energy attribute
Greece

Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)
2003

Comment
Refers to our factory in Lithuania.

Sourcing method
Green electricity products from an energy supplier (e.g. green tariffs)

Energy carrier
Electricity

Low-carbon technology type
Wind

Country/area of low-carbon energy consumption
Lithuania

Tracking instrument used
GO

Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)
1943

Country/area of origin (generation) of the low-carbon energy or energy attribute
Greece

Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)
2006

Comment
Refers to our factory in Lithuania.

Sourcing method
Green electricity products from an energy supplier (e.g. green tariffs)

Energy carrier
Electricity

Low-carbon technology type
Wind

Country/area of low-carbon energy consumption
Lithuania

Tracking instrument used
GO

Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)
1942

Country/area of origin (generation) of the low-carbon energy or energy attribute
Greece

Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)
2012

Comment
Refers to our factory in Lithuania.

Sourcing method
Green electricity products from an energy supplier (e.g. green tariffs)

Energy carrier
Electricity

Low-carbon technology type
Solar

Country/area of low-carbon energy consumption
Lithuania

Tracking instrument used
GO

Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)
2538

Country/area of origin (generation) of the low-carbon energy or energy attribute
Greece

Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)
2012

Comment
Refers to our factory in Lithuania.

Sourcing method
Green electricity products from an energy supplier (e.g. green tariffs)

Energy carrier
Electricity

Low-carbon technology type
Small hydropower (<25 MW)

Country/area of low-carbon energy consumption
Lithuania

Tracking instrument used
GO

Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)
80

Country/area of origin (generation) of the low-carbon energy or energy attribute
Finland

Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)
1983

Comment
Refers to our factory in Lithuania.

Sourcing method
Green electricity products from an energy supplier (e.g. green tariffs)

Energy carrier
Electricity

Low-carbon technology type
Small hydropower (<25 MW)

Country/area of low-carbon energy consumption
Lithuania

Tracking instrument used
GO

Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)
50

Country/area of origin (generation) of the low-carbon energy or energy attribute
Sweden

Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)
1961

Comment
Refers to our factory in Lithuania.

Sourcing method
Green electricity products from an energy supplier (e.g. green tariffs)

Energy carrier
Electricity

Low-carbon technology type
Small hydropower (<25 MW)

Country/area of low-carbon energy consumption
Lithuania

Tracking instrument used
GO

Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)
2

Country/area of origin (generation) of the low-carbon energy or energy attribute
Norway

Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)
1915

Comment
Refers to our factory in Lithuania.

Sourcing method
Green electricity products from an energy supplier (e.g. green tariffs)

Energy carrier
Electricity

Low-carbon technology type
Small hydropower (<25 MW)

Country/area of low-carbon energy consumption
Lithuania

Tracking instrument used
GO

Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)
148

Country/area of origin (generation) of the low-carbon energy or energy attribute
Norway

Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)
1936

Comment
Refers to our factory in Lithuania.

Sourcing method
Green electricity products from an energy supplier (e.g. green tariffs)

Energy carrier
Electricity

Low-carbon technology type
Small hydropower (<25 MW)

Country/area of low-carbon energy consumption
Lithuania

Tracking instrument used
GO

Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)
5

Country/area of origin (generation) of the low-carbon energy or energy attribute
Norway

Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)
1939

Comment
Refers to our factory in Lithuania.

Sourcing method
Green electricity products from an energy supplier (e.g. green tariffs)

Energy carrier
Electricity

Low-carbon technology type
Small hydropower (<25 MW)

Country/area of low-carbon energy consumption
Lithuania

Tracking instrument used
GO

Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)
37

Country/area of origin (generation) of the low-carbon energy or energy attribute
Norway

Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)
1942

Comment
Refers to our factory in Lithuania.

Sourcing method
Green electricity products from an energy supplier (e.g. green tariffs)

Energy carrier
Electricity

Low-carbon technology type
Small hydropower (<25 MW)

Country/area of low-carbon energy consumption
Lithuania

Tracking instrument used
GO

Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)
191

Country/area of origin (generation) of the low-carbon energy or energy attribute
Norway

Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)
1951

Comment
Refers to our factory in Lithuania.

Sourcing method
Green electricity products from an energy supplier (e.g. green tariffs)

Energy carrier
Electricity

Low-carbon technology type
Small hydropower (<25 MW)

Country/area of low-carbon energy consumption
Lithuania

Tracking instrument used
GO

Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)
49

Country/area of origin (generation) of the low-carbon energy or energy attribute
Norway

Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)
1952

Comment
Refers to our factory in Lithuania.

Sourcing method
Green electricity products from an energy supplier (e.g. green tariffs)

Energy carrier
Electricity

Low-carbon technology type
Small hydropower (<25 MW)

Country/area of low-carbon energy consumption
Lithuania

Tracking instrument used
GO

Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)
73

Country/area of origin (generation) of the low-carbon energy or energy attribute
Norway

Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)
1954

Comment
Refers to our factory in Lithuania.

Sourcing method
Green electricity products from an energy supplier (e.g. green tariffs)

Energy carrier
Electricity

Low-carbon technology type
Small hydropower (<25 MW)

Country/area of low-carbon energy consumption
Lithuania

Tracking instrument used
GO

Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)
241

Country/area of origin (generation) of the low-carbon energy or energy attribute
Norway

Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)
1957

Comment
Refers to our factory in Lithuania.

Sourcing method
Green electricity products from an energy supplier (e.g. green tariffs)

Energy carrier
Electricity

Low-carbon technology type
Small hydropower (<25 MW)

Country/area of low-carbon energy consumption
Lithuania

Tracking instrument used
GO

Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)
47

Country/area of origin (generation) of the low-carbon energy or energy attribute
Norway

Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)
1962

Comment
Refers to our factory in Lithuania.

Sourcing method
Green electricity products from an energy supplier (e.g. green tariffs)

Energy carrier
Electricity

Low-carbon technology type
Small hydropower (<25 MW)

Country/area of low-carbon energy consumption
Lithuania

Tracking instrument used
GO

Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)
350

Country/area of origin (generation) of the low-carbon energy or energy attribute
Norway

Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)
1969

Comment
Refers to our factory in Lithuania.

Sourcing method
Green electricity products from an energy supplier (e.g. green tariffs)

Energy carrier
Electricity

Low-carbon technology type
Small hydropower (<25 MW)

Country/area of low-carbon energy consumption
Lithuania

Tracking instrument used
GO

Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)
60

Country/area of origin (generation) of the low-carbon energy or energy attribute
Norway

Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)
1984

Comment
Refers to our factory in Lithuania.

Sourcing method
Green electricity products from an energy supplier (e.g. green tariffs)

Energy carrier
Electricity

Low-carbon technology type
Small hydropower (<25 MW)

Country/area of low-carbon energy consumption
Lithuania

Tracking instrument used
GO

Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)
10

Country/area of origin (generation) of the low-carbon energy or energy attribute
Norway

Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)
1992

Comment
Refers to our factory in Lithuania.

Sourcing method
Green electricity products from an energy supplier (e.g. green tariffs)

Energy carrier
Electricity

Low-carbon technology type
Small hydropower (<25 MW)

Country/area of low-carbon energy consumption
Lithuania

Tracking instrument used
GO

Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)
100

Country/area of origin (generation) of the low-carbon energy or energy attribute
Norway

Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)
1996

Comment
Refers to our factory in Lithuania.

Sourcing method
Green electricity products from an energy supplier (e.g. green tariffs)

Energy carrier
Electricity

Low-carbon technology type
Small hydropower (<25 MW)

Country/area of low-carbon energy consumption
Lithuania

Tracking instrument used
GO

Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)
9

Country/area of origin (generation) of the low-carbon energy or energy attribute
Norway

Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)
2002

Comment
Refers to our factory in Lithuania.

Sourcing method
Green electricity products from an energy supplier (e.g. green tariffs)

Energy carrier
Electricity

Low-carbon technology type
Small hydropower (<25 MW)

Country/area of low-carbon energy consumption
Lithuania

Tracking instrument used
GO

Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)
8

Country/area of origin (generation) of the low-carbon energy or energy attribute
Norway

Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)
2004

Comment
Refers to our factory in Lithuania.

Sourcing method
Green electricity products from an energy supplier (e.g. green tariffs)

Energy carrier
Electricity

Low-carbon technology type
Small hydropower (<25 MW)

Country/area of low-carbon energy consumption
Lithuania

Tracking instrument used
GO

Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)
4

Country/area of origin (generation) of the low-carbon energy or energy attribute
Norway

Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)
2005

Comment
Refers to our factory in Lithuania.

Sourcing method
Green electricity products from an energy supplier (e.g. green tariffs)

Energy carrier
Electricity

Low-carbon technology type
Small hydropower (<25 MW)

Country/area of low-carbon energy consumption
Lithuania

Tracking instrument used
GO

Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)
51

Country/area of origin (generation) of the low-carbon energy or energy attribute
Norway

Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)
2006

Comment
Refers to our factory in Lithuania.

Sourcing method
Green electricity products from an energy supplier (e.g. green tariffs)

Energy carrier
Electricity

Low-carbon technology type
Small hydropower (<25 MW)

Country/area of low-carbon energy consumption
Lithuania

Tracking instrument used
GO

Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)
70

Country/area of origin (generation) of the low-carbon energy or energy attribute
Norway

Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)
2007

Comment
Refers to our factory in Lithuania.

Sourcing method
Green electricity products from an energy supplier (e.g. green tariffs)

Energy carrier
Electricity

Low-carbon technology type
Small hydropower (<25 MW)

Country/area of low-carbon energy consumption
Lithuania

Tracking instrument used
GO

Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)
95

Country/area of origin (generation) of the low-carbon energy or energy attribute
Norway

Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)
2008

Comment
Refers to our factory in Lithuania.

Sourcing method
Green electricity products from an energy supplier (e.g. green tariffs)

Energy carrier
Electricity

Low-carbon technology type
Small hydropower (<25 MW)

Country/area of low-carbon energy consumption
Lithuania

Tracking instrument used
GO

Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)
43

Country/area of origin (generation) of the low-carbon energy or energy attribute
Norway

Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)
2009

Comment
Refers to our factory in Lithuania.

Sourcing method
Green electricity products from an energy supplier (e.g. green tariffs)

Energy carrier
Electricity

Low-carbon technology type
Small hydropower (<25 MW)

Country/area of low-carbon energy consumption
Lithuania

Tracking instrument used
GO

Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)
85

Country/area of origin (generation) of the low-carbon energy or energy attribute
Norway

Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)
2010

Comment
Refers to our factory in Lithuania.

Sourcing method
Green electricity products from an energy supplier (e.g. green tariffs)

Energy carrier
Electricity

Low-carbon technology type
Small hydropower (<25 MW)

Country/area of low-carbon energy consumption
Lithuania

Tracking instrument used
GO

Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)
9

Country/area of origin (generation) of the low-carbon energy or energy attribute
Norway

Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)
2011

Comment
Refers to our factory in Lithuania.

Sourcing method
Green electricity products from an energy supplier (e.g. green tariffs)

Energy carrier
Electricity

Low-carbon technology type
Small hydropower (<25 MW)

Country/area of low-carbon energy consumption
Lithuania

Tracking instrument used
GO

Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)
131

Country/area of origin (generation) of the low-carbon energy or energy attribute
Norway

Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)
2012

Comment
Refers to our factory in Lithuania.

Sourcing method
Green electricity products from an energy supplier (e.g. green tariffs)

Energy carrier
Electricity

Low-carbon technology type
Small hydropower (<25 MW)

Country/area of low-carbon energy consumption
Lithuania

Tracking instrument used
GO

Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)
71

Country/area of origin (generation) of the low-carbon energy or energy attribute
Norway

Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)
2013

Comment
Refers to our factory in Lithuania.

Sourcing method
Unbundled energy attribute certificates (EACs) purchase

Energy carrier
Electricity

Low-carbon technology type
Large hydropower (>25 MW)

Country/area of low-carbon energy consumption
Czechia

Tracking instrument used
GO

Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)
16329

Country/area of origin (generation) of the low-carbon energy or energy attribute
Czechia

Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)
1956

Comment
Refers to our factory in Czechia.

Sourcing method
Unbundled energy attribute certificates (EACs) purchase

Energy carrier
Electricity

Low-carbon technology type
Small hydropower (<25 MW)

Country/area of low-carbon energy consumption
Czechia

Tracking instrument used
GO

Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)
4366

Country/area of origin (generation) of the low-carbon energy or energy attribute
Czechia

Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)
1944

Comment
Refers to our factory in Czechia.

Sourcing method
Unbundled energy attribute certificates (EACs) purchase

Energy carrier
Electricity

Low-carbon technology type
Large hydropower (>25 MW)

Country/area of low-carbon energy consumption
Czechia

Tracking instrument used
GO

Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)
516

Country/area of origin (generation) of the low-carbon energy or energy attribute
Czechia

Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)
1961

Comment
Refers to our factory in Czechia.

Sourcing method
Unbundled energy attribute certificates (EACs) purchase

Energy carrier
Electricity

Low-carbon technology type
Small hydropower (<25 MW)

Country/area of low-carbon energy consumption
Czechia

Tracking instrument used
GO

Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)
1892

Country/area of origin (generation) of the low-carbon energy or energy attribute
Czechia

Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)
1935

Comment
Refers to our factory in Czechia.

Sourcing method
Green electricity products from an energy supplier (e.g. green tariffs)

Energy carrier
Electricity

Low-carbon technology type
Wind

Country/area of low-carbon energy consumption
Greece

Tracking instrument used
GO

Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)
20118

Country/area of origin (generation) of the low-carbon energy or energy attribute
Greece

Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)
2017

Comment
This refers to our factory and tobacco warehouses in Greece.

Sourcing method
Green electricity products from an energy supplier (e.g. green tariffs)

Energy carrier
Electricity

Low-carbon technology type
Large hydropower (>25 MW)

Country/area of low-carbon energy consumption
Greece

Tracking instrument used
GO

Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)
883

Country/area of origin (generation) of the low-carbon energy or energy attribute
Greece

Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)
1960

Comment
This refers to our factory and tobacco warehouses in Greece.

Sourcing method
Green electricity products from an energy supplier (e.g. green tariffs)

Energy carrier
Electricity

Low-carbon technology type
Large hydropower (>25 MW)

Country/area of low-carbon energy consumption
Greece

Tracking instrument used
GO

Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)
2033

Country/area of origin (generation) of the low-carbon energy or energy attribute
Greece

Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)
1989

Comment
This refers to our factory and tobacco warehouses in Greece.

Sourcing method
Green electricity products from an energy supplier (e.g. green tariffs)

Energy carrier
Electricity

Low-carbon technology type
Large hydropower (>25 MW)

Country/area of low-carbon energy consumption
Greece

Tracking instrument used
GO

Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)
2164

Country/area of origin (generation) of the low-carbon energy or energy attribute
Greece

Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)
1981

Comment
This refers to our factory and tobacco warehouses in Greece.

Sourcing method
Green electricity products from an energy supplier (e.g. green tariffs)

Energy carrier
Electricity

Low-carbon technology type
Renewable energy mix, please specify (Geothermal,hydro and wind)

Country/area of low-carbon energy consumption
New Zealand

Tracking instrument used
Contract

Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)
51

Country/area of origin (generation) of the low-carbon energy or energy attribute
New Zealand

Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)

Comment
This refers to our offices in New Zealand.

C8.2g

(C8.2g) Provide a breakdown of your non-fuel energy consumption by country.

Country/area
Brazil

Consumption of electricity (MWh)
111.54

Consumption of heat, steam, and cooling (MWh)
0

Total non-fuel energy consumption (MWh) [Auto-calculated]
111.54

Is this consumption excluded from your RE100 commitment?
<Not Applicable>

Country/area
Greece

Consumption of electricity (MWh)
0

Consumption of heat, steam, and cooling (MWh)
34.02

Total non-fuel energy consumption (MWh) [Auto-calculated]
34.02

Is this consumption excluded from your RE100 commitment?
<Not Applicable>

Country/area
Indonesia

Consumption of electricity (MWh)
1238.23

Consumption of heat, steam, and cooling (MWh)
0

Total non-fuel energy consumption (MWh) [Auto-calculated]
1238.23

Is this consumption excluded from your RE100 commitment?
<Not Applicable>

Country/area
Italy

Consumption of electricity (MWh)
5923.55

Consumption of heat, steam, and cooling (MWh)
0

Total non-fuel energy consumption (MWh) [Auto-calculated]
5923.55

Is this consumption excluded from your RE100 commitment?
<Not Applicable>

Country/area
Pakistan

Consumption of electricity (MWh)
823.62

Consumption of heat, steam, and cooling (MWh)
0

Total non-fuel energy consumption (MWh) [Auto-calculated]
823.62

Is this consumption excluded from your RE100 commitment?
<Not Applicable>

Country/area
Philippines

Consumption of electricity (MWh)
2200.33

Consumption of heat, steam, and cooling (MWh)
0

Total non-fuel energy consumption (MWh) [Auto-calculated]
2200.33

Is this consumption excluded from your RE100 commitment?
<Not Applicable>

Country/area
Serbia

Consumption of electricity (MWh)
40.29

Consumption of heat, steam, and cooling (MWh)
0

Total non-fuel energy consumption (MWh) [Auto-calculated]
40.29

Is this consumption excluded from your RE100 commitment?
<Not Applicable>

Country/area
Sweden

Consumption of electricity (MWh)
0

Consumption of heat, steam, and cooling (MWh)
1.73

Total non-fuel energy consumption (MWh) [Auto-calculated]
1.73

Is this consumption excluded from your RE100 commitment?
<Not Applicable>

Country/area
Switzerland

Consumption of electricity (MWh)
0

Consumption of heat, steam, and cooling (MWh)
327.6

Total non-fuel energy consumption (MWh) [Auto-calculated]
327.6

Is this consumption excluded from your RE100 commitment?
<Not Applicable>

Country/area
Turkey

Consumption of electricity (MWh)
175.16

Consumption of heat, steam, and cooling (MWh)
0

Total non-fuel energy consumption (MWh) [Auto-calculated]
175.16

Is this consumption excluded from your RE100 commitment?
<Not Applicable>

Country/area
Portugal

Consumption of electricity (MWh)
1284.34

Consumption of heat, steam, and cooling (MWh)
0

Total non-fuel energy consumption (MWh) [Auto-calculated]
1284.34

Is this consumption excluded from your RE100 commitment?
<Not Applicable>

C9. Additional metrics

C9.1

(C9.1) Provide any additional climate-related metrics relevant to your business.

Description
Waste

Metric value
1.43

Metric numerator
Waste landfilled or incineration w/o heat recovery

Metric denominator (intensity metric only)
Total waste generated

% change from previous year
1.6

Direction of change
Decreased

Please explain
The start-up of our new RRP facilities in Italy, impacted our disposal ratio in 2017. Since 2018 we solved this issue and we are back on track, including in 2021, to maintain our long-term target to reduce and keep our disposal to landfill ratio below 5%.

C10. Verification

C10.1

(C10.1) Indicate the verification/assurance status that applies to your reported emissions.

	Verification/assurance status
Scope 1	Third-party verification or assurance process in place
Scope 2 (location-based or market-based)	Third-party verification or assurance process in place
Scope 3	Third-party verification or assurance process in place

C10.1a

(C10.1a) Provide further details of the verification/assurance undertaken for your Scope 1 emissions, and attach the relevant statements.

Verification or assurance cycle in place
Annual process

Status in the current reporting year
Complete

Type of verification or assurance
Reasonable assurance

Attach the statement
PMI GHG Verification Statement GHG 2021 V4external - 160522.pdf

Page/ section reference
Page 1: standard used
Page 2 and 3: method and scope
Page 3: total Scope 1

Relevant standard
ISO14064-3

Proportion of reported emissions verified (%)
100

C10.1b

(C10.1b) Provide further details of the verification/assurance undertaken for your Scope 2 emissions and attach the relevant statements.

Scope 2 approach
Scope 2 market-based

Verification or assurance cycle in place
Annual process

Status in the current reporting year
Complete

Type of verification or assurance
Reasonable assurance

Attach the statement
PMI GHG Verification Statement GHG 2021 V4external - 160522.pdf

Page/ section reference
Page 1: standard used
Page 2 and 3: method and scope
Page 3: total Scope 2 market-based and location based

Relevant standard
ISO14064-3

Proportion of reported emissions verified (%)
100

Scope 2 approach
Scope 2 location-based

Verification or assurance cycle in place
Annual process

Status in the current reporting year
Complete

Type of verification or assurance
Reasonable assurance

Attach the statement
PMI GHG Verification Statement GHG 2021 V4external - 160522.pdf

Page/ section reference
Page 1: standard used
Page 2 and 3: method and scope
Page 3: total Scope 2 market-based and location based

Relevant standard
ISO14064-3

Proportion of reported emissions verified (%)
100

C10.1c

(C10.1c) Provide further details of the verification/assurance undertaken for your Scope 3 emissions and attach the relevant statements.

Scope 3 category
Scope 3: Purchased goods and services
Scope 3: Capital goods
Scope 3: Fuel and energy-related activities (not included in Scopes 1 or 2)
Scope 3: Upstream transportation and distribution
Scope 3: Waste generated in operations
Scope 3: Business travel
Scope 3: Employee commuting
Scope 3: Downstream transportation and distribution
Scope 3: Use of sold products
Scope 3: End-of-life treatment of sold products

Verification or assurance cycle in place
Annual process

Status in the current reporting year
Complete

Type of verification or assurance
Limited assurance

Attach the statement
PMI Scope 3 GHG Verification Statement 2021 - v2.0.pdf

Page/section reference
Page 1: total Scope 3
Page 1: standard used
Page 2 and 3: method and scope

Relevant standard
ISO14064-3

Proportion of reported emissions verified (%)
100

C10.2

(C10.2) Do you verify any climate-related information reported in your CDP disclosure other than the emissions figures reported in C6.1, C6.3, and C6.5?
Yes

C10.2a

(C10.2a) Which data points within your CDP disclosure have been verified, and which verification standards were used?

Disclosure module verification relates to	Data verified	Verification standard	Please explain
C6. Emissions data	Year on year change in emissions (Scope 1 and 2)	ISO14064-3	PMI has chosen to verify this data in order to certify our year-on-year progress on carbon emission reductions in all our operations (factories, offices, warehouses and fleet). PMI GHG Verification Statement GHG 2021 V4external - 160522.pdf
C6. Emissions data	Year on year change in emissions (Scope 3)	ISO14064-3	PMI has chosen to verify this data from our carbon footprint model in order to certify our year-on-year progress on carbon emission across our value chain. PMI Scope 3 GHG Verification Statement 2021 - v2.0.pdf

C11. Carbon pricing

C11.1

(C11.1) Are any of your operations or activities regulated by a carbon pricing system (i.e. ETS, Cap & Trade or Carbon Tax)?
Yes

C11.1a

(C11.1a) Select the carbon pricing regulation(s) which impacts your operations.
EU ETS
Switzerland carbon tax
Ukraine carbon tax
Other carbon tax, please specify (German Fuel Emissions Trading Act (Brennstoffemissionshandelsgesetz - BEHG))

C11.1b

(C11.1b) Complete the following table for each of the emissions trading schemes you are regulated by.

EU ETS

% of Scope 1 emissions covered by the ETS
21

% of Scope 2 emissions covered by the ETS
0

Period start date
January 1 2021

Period end date
December 31 2021

Allowances allocated
48940

Allowances purchased
22843

Verified Scope 1 emissions in metric tons CO2e
50936

Verified Scope 2 emissions in metric tons CO2e
0

Details of ownership
Facilities we own and operate

Comment
The “% scope 1 emissions covered”, covers emissions from our manufacturing sites in Italy, the Netherlands and Romania.
Additional information: only scope 1 included.

C11.1c

(C11.1c) Complete the following table for each of the tax systems you are regulated by.

Switzerland carbon tax

Period start date
January 1 2021

Period end date
December 31 2021

% of total Scope 1 emissions covered by tax
0.52

Total cost of tax paid
183030

Comment
This refers to our factory in Switzerland

Ukraine carbon tax

Period start date
January 1 2021

Period end date
December 31 2021

% of total Scope 1 emissions covered by tax
1.25

Total cost of tax paid
180

Comment
This refers to our factory in Ukraine

Other carbon tax, please specify

Period start date
January 1 2021

Period end date
December 31 2021

% of total Scope 1 emissions covered by tax
0.19

Total cost of tax paid
2690

Comment
This belongs to our factory in Germany. German Fuel Emissions Trading Act (Brennstoffemissionshandelsgesetz - BEHG)

C11.1d

(C11.1d) What is your strategy for complying with the systems you are regulated by or anticipate being regulated by?

European Union Allowances (EUA)'s prices have shown a steady up-moving trend in 2021. The main reason behind this uptrend is an expectation of an unbalanced market on the demand side mainly due to the activity of the EU ETS system to reduce the oversupply number of credits in the market and thus low prices in the past and a high demand of credits on the voluntary market. In order to mitigate this impact reducing energy consumption through increasing energy efficiency in our factories is a priority. At PMI, we started in 2012 our Global Energy Management Program paired with local reduction initiatives, targeting energy and CO2 savings to minimize the need for purchasing EUAs. This program represents PMI's main component of its strategy to comply with the relevant ETS. We balance our allowances purchased over a 3-year timeframe. As a result of the efforts, energy reductions have enabled our factories in Portugal, Germany and Lithuania to be removed from the EU ETS scheme in the last 5 years (moving below total combustion capacity thresholds). Regarding emerging regulations, we are monitoring closely and anticipating the strategic position of our manufacturing plant vs. the potential impact of such cap-and-trade mechanism or carbon tax. E.g., within the Korea ETS, it is our understanding that a company will be included in the scheme if the average CO2 emission of the last three years is over 125,000 tons/yr. South Korea is a strategic market where we launched our smoke-free products and we may increase production capacity in the future. Considering that currently our activities resume to an average 25,000tons/year CO2 emissions, we could increase the capacity without immediate threats from such carbon tax. Moreover, through the implementation of our global program "Drive for Zero", we aim to improve efficiency in our manufacturing facilities and eliminate losses, reducing emissions intensity to further mitigate the impact of emerging regulations in South Korea.

Furthermore, we use internal carbon pricing to incentivize and drive reductions in GHG emissions. Through the Internal Carbon Pricing we implement 1) a shadow price (SP) to internalize environmental costs and factor them into investment decisions, and 2) an internal carbon levy (CL) as an incentive to reduce GHG emissions and a way to generate funding for solutions to compensate for unavoidable emissions. While SC helps prioritize the business case for investments in activities aimed at structurally reducing carbon emissions, our CL helps determine the investments required to abate our emissions through offsetting or insetting initiatives.

C11.2

(C11.2) Has your organization originated or purchased any project-based carbon credits within the reporting period?
Yes

C11.2a

(C11.2a) Provide details of the project-based carbon credits originated or purchased by your organization in the reporting period.

Credit origination or credit purchase
Credit purchase

Project type
Energy efficiency: households

Project identification
myclimate awarded the PMI factory in Klaipeda, Lithuania, Mexico, PMPSA factory in Neuchatel Switzerland with the claim “climate-neutral factory 2021” and PMI Operations Center offices in Lausanne Switzerland. The climate-neutrality encompasses all scope 1 and scope 2 emissions. The corresponding GHG emissions have been validated and all remaining emissions (i.e., 11,381 metric tons CO2e) have been offset with high-quality carbon offset certificates from myclimate.

Carbon offset project
• Project: Impact Carbon and myclimate Safe Water and Improved Cookstoves Global PoA - Uganda VPA

- Project type: Energy efficiency
- Project location: Uganda
- Project standard: Gold Standard CER
- GS Project ID: GS2296
- myclimate project number: 7181

Verified to which standard
Gold Standard

Number of credits (metric tonnes CO2e)
11381

Number of credits (metric tonnes CO2e): Risk adjusted volume
11381

Credits cancelled
Yes

Purpose, e.g. compliance
Voluntary Offsetting

Credit origination or credit purchase
Credit purchase

Project type
Energy efficiency: households

Project identification
carbonsink awarded the PMI factory in Portugal with the claim “climate-neutral factory 2021”. The climate-neutrality encompasses all scope 1 and scope 2 emissions. The corresponding GHG emissions have been validated and all remaining emissions (i.e., 1,748 metric tons CO2e) have been offset with high-quality carbon offset certificates from carbonsink.

Carbon offset project
- Project: Promoting energy efficiency & clean cooking in Pemba
- Project type: Energy efficiency
- Project location: Mozambique
- Project standard: Gold Standard CER
- GS project ID: GS7524

Verified to which standard
Gold Standard

Number of credits (metric tonnes CO2e)
1748

Number of credits (metric tonnes CO2e): Risk adjusted volume
1748

Credits cancelled
Yes

Purpose, e.g. compliance
Voluntary Offsetting

Credit origination or credit purchase
Credit purchase

Project type
Agriculture

Project identification
carbonsink awarded the PMI factory in Portugal with the claim “climate-neutral factory 2021”. The climate-neutrality encompasses all scope 1 and scope 2 emissions. The corresponding GHG emissions have been validated and all remaining emissions (i.e., 2,999 metric tons CO2e) have been offset with high-quality carbon offset certificates from carbonsink.

Carbon offset project

- Project: Revegetation with fruit Trees in North Manica Province, Mozambique
- Project type: Agriculture/Forestry/Other land use
- Project location: Mozambique
- Project standard: Verified Carbon Standard
- carbonsink project number: VCS2085

Verified to which standard
VCS (Verified Carbon Standard)

Number of credits (metric tonnes CO2e)
2999

Number of credits (metric tonnes CO2e): Risk adjusted volume
2999

Credits cancelled
Yes

Purpose, e.g. compliance
Voluntary Offsetting

C11.3

(C11.3) Does your organization use an internal price on carbon?
Yes

C11.3a

(C11.3a) Provide details of how your organization uses an internal price on carbon.

Objective for implementing an internal carbon price
Drive low-carbon investment
Identify and seize low-carbon opportunities

GHG Scope
Scope 1
Scope 2

Application
The underlying concept PMI applies on internal carbon price is to have a visible and fair quantification of the financial impact of emissions to incentivize and increase the viability of actions and investments focusing on their reduction. Integrating carbon pricing in our business decisions will help to: i) Mitigate hidden future risks due to climate change (such as regulations and taxations) by embedding their true impact in the business case of a project or investment, and helping drive and prioritize investments that organically reduce mid and long term CO2 emissions; ii) Allocate sufficient funds to activities aimed at decarbonizing the business and/or offsetting/insetting its emissions; iii) Attract ESG investors positioning PMI as a leading company in environmental sustainability. We have modelled what an adequate Shadow Carbon Price should be for PMI following a robust methodology, concluding that an adequate Shadow Carbon Price for PMI is US$ 65 per ton of CO2e emitted.

Actual price(s) used (Currency /metric ton)
65

Variance of price(s) used
To define PMI's internal carbon price, the Stiglitz and Stern price corridor has been identified as the "perfect theoretical" solution to set shadow carbon price. On practical implementation to better integrate it to PMI's multi-disciplinary processes and culture, a single shadow carbon price methodology has been designed for easier adoption through internal consultation. The objective of the single price methodology was to keep the robustness and internationally recognized practices, modelling the Stiglitz and Stern references and applying them in a worst-case scenario analysis of transition risks projected by 2030, specific to our emission profile and the geographies where we are operating. To do so, the Stiglitz and Stern price corridor assumptions were merged in a single price through the following steps: 1. Each country in which PMI has a manufacturing facility (offices and warehouses were not taking in account) was weighted in ratio to its total carbon weigh considering 2019 direct emissions profiles, Scope 1 and Scope 2 location based (i.e.: to not be biased by green electricity purchasing strategies). 2. Each country emission was then divided by the total sum of all countries carbon emission profiles to allocate a carbon intensity to each country. 3. Countries were then split in the (4) categories associated to their risk level in relation to carbon tax or carbon regulations already in vigor or planned to be in a near horizon. PMI integrates in today's shadow carbon price evaluation, the transition risks 10 years in advance for a forward-looking approach. 4. The carbon intensity of each country was then multiplied by the country risk carbon price allocating the respective carbon weighted contribution. 5. The single shadow price was finally obtained by the sum of all the countries carbon weighted contribution and adjusted at the most meaningful close integer. In 2020 exercise, for example, the weighted single shadow carbon price was modelled at $65.86 per ton of CO2e and therefore the PMI's shadow carbon price was set at $65 per ton of CO2e. The PMI's shadow carbon price is revised annually to track changes in the countries' risk profile and to be adjusted to most current PMI's direct GHG emissions and country specific GHG emission footprint profiles. After review in 2021 the shadow carbon price was kept flat at $65 per ton of CO2e.

Type of internal carbon price
Shadow price

Impact & implication
As an example of Shadow Price (SP) usage, in 2021 through our Drive 4 Zero and Energy Saving Initiatives an additional 8 carbon emission reduction projects were approved for a total of more than 200 projects. Around $22 million budget was allocated to support the execution of the projects in our manufacturing sites driving around 6% reduction in carbon emissions across our manufacturing facilities in 2021 vs. 2020.
The application of the SP increases the IRR and reduces the impact of the payback period thus making possible efficiency and emission reduction projects that would not qualify otherwise according to our internal investment policy. Examples of projects that have been approved thanks to the valorization of the cost of carbon include a project to increase energy efficiency in the Philippines where drastically increased compressed air generation reduces energy consumption, while in Kazakhstan, Pakistan, Argentina and Portugal we reduced the baseload of our plants with a set of impactful interventions. Furthermore, in 2021 a portfolio of zero-carbon technologies (ZCT) was created, aiming at increasing the usage of renewable energy and in-house self-generation through innovative technologies by 2025. SP is accounted in the business cases of projects under the ZCT, enabling more favorable IRR. E.g., in our manufacturing site in Italy, a complex solution space has been developed in 2021, incl. the site's electrification plans. A mix of technologies from thermal electrification via heat pumps, electric boiler and in-house PV plants are expected to be operational by 2025. Such system will deliver 62 GWh/year, improving the overall heat generation efficiency as well by 6%, against an investment of approx. $10.2million.

The application of PMI SP to internalize the costs of externalities in the financial evaluation of projects allowed to improve financial parameters of those projects and served as enabler of the carbon neutrality strategy favoring investments that will organically accelerate the reduction path and support achievement of our neutrality targets. The internal SP has been instrumental to prioritize projects delivering higher impact in carbon reduction emissions.
Embedding an internal SP in the financial decision contributes to raising awareness to invest in environmentally conscious and low carbon technologies.

Objective for implementing an internal carbon price
Change internal behavior
Drive low-carbon investment
Identify and seize low-carbon opportunities
Supplier engagement

GHG Scope
Scope 1
Scope 2
Scope 3

Application
Carbon Levy is recognized as one of the main instruments used by corporates to account for the cost of the negative externalities of carbon emissions in business and internal expenditure decisions.
A carbon levy enables us to internalize external costs by virtually charging our business functions or affiliates for their respective emissions. With the aim of supporting behavioral change, the levy is collected in a climate fund (PMI Portfolio of Climate Investments), which will finance high-quality carbon insetting and/or offsetting projects.

The Carbon Levy mechanism has been approved by Company Management in the course of 2020 and consequently implemented in our expenditure process to reduce carbon emissions and increase energy efficiency.

Actual price(s) used (Currency /metric ton)
8

Variance of price(s) used
We do not forecast to apply a variance in price. A fix price will be implemented throughout our business overtime, on direct and indirect emission beginning with selected business units (i.e., Scope 1 and 2 emissions and emissions from business travel). The PMI's shadow carbon price is revised annually to track changes in the countries' risk profile and to be adjusted to most current PMI's direct GHG emissions and country specific GHG emission footprint profiles. After review in 2021 the shadow carbon price was kept flat at $65 per ton of CO2e.

Type of internal carbon price
Internal fee

Impact & implication
A carbon levy enables us to internalize external costs by virtually charging our business functions or affiliates for their respective emissions. With the aim of supporting behavioral change, the levy is collected in a dedicated climate fund (PMI Portfolio of Climate Investments), which will finance high-quality carbon insetting and/or offsetting projects.
PMI's carbon levy helps size the investments required today to abate our emissions through offsetting (e.g., acquisition of green certificates) or in-setting initiatives (e.g., agroforestry projects, and carbon sequestration programs). We have modelled what the carbon levy should be for PMI basing our calculation on data on the forecasted voluntary carbon market prices, our CO2 compensation profile (i.e., the number of tons of CO2 to be compensated through offsetting/in-setting investments), our carbon neutrality time horizon, and the compensation strategy we want to adopt. We started implementing our carbon levy in 2020 within the business functions accounting for the bulk of our direct emissions, such as our manufacturing sites, offices, and fleet, to form a budget that will be conducive to set up a PMI portfolio of climate investments to compensate remaining unavoidable CO2 emissions and achieve carbon neutrality. The Carbon Levy mechanism has been approved by Company Management in the course of 2020 and consequently implemented in our expenditure process to reduce carbon emissions and increase energy efficiency.

C12. Engagement

C12.1

(C12.1) Do you engage with your value chain on climate-related issues?
Yes, our suppliers
Yes, our customers/clients
Yes, other partners in the value chain

C12.1a

(C12.1a) Provide details of your climate-related supplier engagement strategy.

Type of engagement
Engagement & incentivization (changing supplier behavior)

Details of engagement
Run an engagement campaign to educate suppliers about climate change

% of suppliers by number
1

% total procurement spend (direct and indirect)
41

% of supplier-related Scope 3 emissions as reported in C6.5
55

Rationale for the coverage of your engagement
With over 29,000 tier 1 suppliers across more than 180 markets, our supply chain spend amounted to approximately USD 11.1 billion in 2021. Our global supply chain is organized into two main streams—direct spend (tobacco leaf, direct materials, electronic devices and advanced procurement) and indirect spend (technical procurement, R&D expenditure, indirect materials and services). From a sustainability standpoint, the supply chain categories exposed to the highest risks pertain to our direct spend and include: 1) Tobacco production across Africa, Asia, and South America, with the main risks in the areas of working conditions, child labor, climate change, access to water, and the socioeconomic well-being of farming communities; 2) Electronics manufacturing, with the main risks relating to working conditions; 3) Paper and pulp-based materials, with the main risks linked to deforestation, biodiversity loss, and climate change.

Our most carbon-intensive supplies are the direct materials used in the manufacturing of our products, such as cellulose acetate tow, pulp and paper, and our smoke-free electronic devices; together direct spend suppliers represent 55% of our Scope 3 emissions. With a significant portion of our GHG emissions arising from direct spend, engaging with our suppliers to contribute to their transition toward a net zero economy is at the heart of our approach. Our decision to accelerate our ambition to achieve net zero emissions along our value chain by 10 years—moving our target from 2050 to 2040—means we must double our efforts to encourage and support our suppliers in reducing their emissions. Due to the relevance of direct spend suppliers in terms of carbon intensity, spend and exposure to climate risks, PMI is prioritizing engagement with these suppliers through education about climate change, and engagement to adopt Science Based Targets.

Impact of engagement, including measures of success
PMI's measures of success are three-fold:
1) percentage of suppliers by spend which are covered through our climate related engagement activities (e.g., developing of emission reduction projects, carrying out climate related risks assessments, building capacities on data collection, emissions reduction, target setting, and reporting). For example, we aim to engage 100% of our critical Direct Material suppliers by 2025 (90% achieved in 2021).
2) percentage of tobacco growing areas covered with our Local Risk Assessments (LRA). As part of the LRA, PMI engages tobacco suppliers and farmers to identify, assess and manage potential water impacts arising from local climate risks. As irrigation accounts for half the water used to grow tobacco sourced by PMI (with an average of 339 cubic meters per ton of tobacco produced in 2021), it is a critical input for our business. Since we started measuring it in 2018, water requirements related to our purchased tobacco volume have gradually decreased in absolute terms; however, our supply chain is subject to off-trend years like the one we experienced in 2021 where seasonal variability increased soil water stress and caused our irrigation needs to increase. To continue improving our understanding of local conditions and be better placed to manage climate risks we have a target to carry out a LRA in 100% of our current tobacco growing areas by 2025 (69% reached by end of 2021).
3) percentage of suppliers to adopt Science Based Targets. In 2021, we piloted supplier engagement targets with two electronic suppliers in close collaboration with CDP China, resulting in their targets being recently approved by the SBTi. Results of this pilot were used to develop a Science Based Target for supplier engagement, validated in early 2022 by SBTi. The measure of success for this engagement is that by 2025, 40% of our direct spend suppliers, representing 15% of our total spend will have adopted Science Based Targets. Over the next years, PMI is expecting to expand the scope and coverage of this target to include additional suppliers.

Comment
No further comments

C12.1b

(C12.1b) Give details of your climate-related engagement strategy with your customers.

Type of engagement & Details of engagement

Education/information sharing	Run an engagement campaign to education customers about your climate change performance and strategy

% of customers by number
100

% of customer - related Scope 3 emissions as reported in C6.5
77

Please explain the rationale for selecting this group of customers and scope of engagement
We engage 100% of our consumers (i.e., please read same as customers) on climate-related issues as we recognize that increased climate action expectations and shifting consumer preferences are important for us. Consumer related emissions are 77% of total downstream emissions (Use and End of Life of product categories). Failing to develop an effective GHG emission reduction strategy that addresses impacts from direct operations and supply chains, as well as developing products that are environmentally friendly, can have significant impacts on our operations. Additionally, our consumers insights on our climate targets, performance and products can help us understanding our market potential and further opportunities. For these reasons, we engage 100% of our consumers through several direct and indirect initiatives, incl. raising awareness on environmental issues through education campaigns, as well as sourcing agri-commodities and developing innovative and environmentally friendly products.
Our strategic business transformation towards a smoke-free future, replacing cigarettes with Smoke-Free Products (SFP), has changed our operating model, organizational structure and culture and accelerated our evolution to a consumer-centric, technology and science-driven company. Beyond offering smokers less harmful alternatives to cigarettes, we also aim to reduce our products' environmental footprint by integrating circularity considerations at the design stage and strengthening our used devices collection and recovery programs. As part of our business transformation, we strive to continuously share our efforts on sustainability and climate-change related issues, engaging with all our stakeholders, including consumers, by means of publicly disclosing our annual Integrated Report, communication campaigns and our CDP disclosures, demonstrating our achievements related, for instance, to our Science Based emission reduction Targets.

Impact of engagement, including measures of success
PMI measures success of its engagement activities in multiple ways. When it comes to educating our consumers (i.e., please read same as customers) on PMI's climate strategy and performance, PMI relies on usage of online platforms and other materials as main method of engagement. In this context, our measure of success is based on two components: 1) PMI's ability to provide clear and transparent information regarding the current and future direct and indirect climate impacts from its overall global operations to stakeholders (incl. customers) worldwide; 2) leveraging on findings from customer surveys to assess and inform PMI's sustainability strategy including climate change.
Through a suite of external publications, we seek to transparently disclose our direct and indirect environmental impacts, including climate.
In 2021 we published PMI's Low Carbon Transition Plan (LCTP), showcasing the company's ambitious new sustainability targets and setting the scene for how it will operate in future. Our LCTP available online to all consumers provides technical details on how we plan to significantly reduce our value chain greenhouse gasses emissions, especially CO2, to achieve our climate ambitions.
Issued in early 2022, our 2021 Integrated Report (IR) explains PMI's dependency on the environment, as well as how the company creates social, environmental and economic value to our stakeholders and society. We monitor traffic on various sustainability resources (incl. climate) by measuring access evolution over time (-26% vs. 2021, +37% vs. 2020), as well as downloads (-36% vs. 2021, +27% vs. 2020).

Another example of PMI's engagement is the use of surveys. In 2021 PMI carried out 7 surveys with over 2000 users in 4 key SFP markets. Results provided valuable insights on our consumers' view and evaluation, with over 90% expressing positive perceptions of our company's efforts in sustainability as a progressive and innovative brand, as well as appreciation for our circular pillar flagship Sustainability programs. This feedback enabled PMI to design mechanics, assets and campaigns for these programs and, thus, integrate them in the design of our SFP roadmap and branding campaign. Threshold for success was defined as achieving above 90% positive views across the board and achieved in 2021.

C12.1d

(C12.1d) Give details of your climate-related engagement strategy with other partners in the value chain.

In our value chain we engage with our employees and global partners through a two-folded strategy that focuses on training initiatives and continuously renewing our fleet to more eco-friendly vehicles. In some countries where we operate, eco-driving training is conducted to promote more environmental-friendly practices by our drivers, resulting for example in fuel savings, and consequently reduction in carbon emissions and air pollutions at local level. Driving efficiency in reducing carbon emissions is key in all business areas of PMI that contribute to the carbon footprint of the company.

Our fleet carbon emissions are essential to address as 1) they constitute a daily and constant impact to the environment, 2) because showing leadership in tackling fleet carbon emissions is a tangible action in line with PMI leading practices in sustainability, and 3) is an important driver of behavioral change since cars are part of the daily routine of the employees in most of the markets where PMI operates. Transformation strategies start from behavioral changes and PMI wants to be a catalyst in each area of improvement. By the end of 2021, one third of company drivers were enrolled in the first year of our fleet safety e-learning program, which incorporates eco-driving modules. We expect all drivers to enroll by the end of 2023. Of the group offered this training, 70% participated in the course. We anticipate the participation rate will climb to 85% in 2022. Since 2020, in Israel, Brazil, Indonesia and Turkey e-learning programs are being conducted with 800 drivers, and the long-term plan is to cover the entire PMI fleet drivers by 2024. By the end of 2021, 47% of our working-tool cars were equipped with telematics, which provide the driver and the company with data on driving behaviors and proactively helps, among others, decrease carbon emissions. We aim to have all our working-tool vehicles equipped with tools and new ways of working in the medium term.

These initiatives will contribute to the overall reduction in our fleet emissions from the 2019 baseline which we assess as measure of success of the engagement and the overall strategy.

C12.2

(C12.2) Do your suppliers have to meet climate-related requirements as part of your organization's purchasing process?
Yes, climate-related requirements are included in our supplier contracts

C12.2a

(C12.2a) Provide details of the climate-related requirements that suppliers have to meet as part of your organization's purchasing process and the compliance mechanisms in place.

Climate-related requirement
Setting a science-based emissions reduction target

Description of this climate related requirement
With over 29,000 tier 1 suppliers across more than 180 markets, our supply chain spend amounted to approximately USD 11.1 billion in 2021. Our global supply chain is organized into two main streams—direct spend (tobacco leaf, direct materials, electronic devices and advanced procurement) and indirect spend (technical procurement, R&D expenditure, indirect materials and services). From a sustainability standpoint, the supply chain categories exposed to the highest risks pertain to our direct spend. Likewise, our most carbon-intensive supplies are the direct materials used in the manufacturing of our products, such as cellulose acetate tow, pulp and paper, and our smoke-free electronic devices; together direct spend suppliers represent 55% of our Scope 3 emissions. Due to the relevance of direct spend suppliers in terms of carbon intensity, spend and exposure to climate risks, PMI is engaging these suppliers as part of a Science Based Target for supplier engagement. Through this target, 40% of PMI's direct spend suppliers representing 15% of our total spend, will be adopting Science Based Targets by 2025. Over the next years, PMI is expecting to maintain and expand the scope and coverage of this target to include additional suppliers, despite expected changes in spend allocation due to volume reallocation and change of suppliers as part of the company's transition to smoke-free products.

% suppliers by procurement spend that have to comply with this climate-related requirement
15

% suppliers by procurement spend in compliance with this climate-related requirement
15

Mechanisms for monitoring compliance with this climate-related requirement
Certification
First-party verification

Response to supplier non-compliance with this climate-related requirement
Retain and engage

C-AC12.2/C-FB12.2/C-PF12.2

(C-AC12.2/C-FB12.2/C-PF12.2) Do you encourage your suppliers to undertake any agricultural or forest management practices with climate change mitigation and/or adaptation benefits?
Yes

C-AC12.2a/C-FB12.2a/C-PF12.2a

(C-AC12.2a/C-FB12.2a/C-PF12.2a) Specify which agricultural or forest management practices with climate change mitigation and/or adaptation benefits you encourage your suppliers to undertake and describe your role in the implementation of each practice.

Management practice reference number
MP1

Management practice
Other, please specify (Responsible Sourcing Principles)

Description of management practice
In 2017, we launched our Responsible Sourcing Principles (RSP) and Implementation Guidelines, which established the foundation for a more comprehensive and systematic approach to addressing supply chain sustainability beyond our agricultural supply chain. The RSP provides our suppliers with PMI's expectations in the areas of human rights, environment, and business integrity. The environment section covers environmental compliance and management, and resource consumption and waste minimization. In the area of climate change, our RSP encourages suppliers to review, identify and minimize their environmental impacts, especially regarding land use, waste, emissions, energy and water consumption. Our RSP also encourages supplier to set targets for improvement, measure performance and report on them.

Your role in the implementation
Operational

Explanation of how you encourage implementation
The RSP applies to all suppliers doing business with PMI but tobacco farmers. In addition, tobacco suppliers and their farmers follow our Good Agricultural Practices (GAP) program and Agricultural Labor Practices Code. In 2017 we rolled out the RSP to global partners covering 99% of our total spend on global vendors by December 2017. All our business partners must comply with our Responsible Sourcing Principles which define expectations both for our suppliers, and their suppliers. We validate the adherence to the RSP engaging with them via our Supplier Due Diligence program.

In 2021 we enhanced the program partnering with EcoVadis the most trusted business sustainability ratings and the Responsible Business Alliance (RBA) the largest industry coalition dedicated to corporate social responsibility in global supply chains.
The engagement focuses on critical suppliers, that are defined as follows: Critical Suppliers are those Tier 1 and Tier 2 managed suppliers who manufacture or sell components used in the manufacture of PMI finished products with a minimum yearly spend > $0.5 million and all Electronics suppliers Tier 1 and Tier 2 who are commercially managed by PMI. All tobacco farmers directly contracted by PMI affiliates or by our third-party tobacco suppliers are considered critical suppliers. Third-party tobacco suppliers are also considered critical suppliers. Our tobacco suppliers on top of the RSP must comply with the Good Agriculture Practices (GAP) and the Agricultural Labor Practices (ALP) codes which are verified through a continuous on the ground monitoring via field technicians.
Our final objective is to support suppliers to continuously improve their practices to meet our requirements and improve the overall working and living conditions within our supply chain. Tracking and reporting on our suppliers' performance, both internally and externally, will drive transparency. In addition, we will continue to look for further opportunities to collaborate with our suppliers in specific projects to improve their sustainability performance.

Climate change related benefit
Emissions reductions (mitigation)
Increasing resilience to climate change (adaptation)

Comment
Compliance with the RSP is achieved with a minimum EcoVadis score of 45 out of 100. Electronics suppliers undergo an on-site audit at all facilities that supply PMI. Compliance with the RSP is achieved with a minimum audit score (Validate Assessment Protocol) of 125 out of 200. Suppliers scoring below the expected level must complete a corrective action plan and proceed to re-assessment until the score is satisfactory.

Management practice reference number
MP2

Management practice
Other, please specify (Good Agricultural Practices Program)

Description of management practice
Tobacco growing, harvesting and curing account for around 20 percent of our carbon footprint. We are working with farming communities to reduce the environmental footprint of tobacco curing and growing. We do that through our Good Agricultural Practices (GAP) program and strategic initiatives such as curing barn improvements and reforestation. GAP lays out extensive agricultural environmental practices for farmers to adopt; these practices cover effective farming techniques, the safe storage, handling and use of chemicals (crop protection agents), water and waste management, energy and raw material efficiency. GAP also covers soil management/conservation, biodiversity and the sustainable use of wood. GAP implementation helped us deliver on our 2021 target for CO2 reduction in our value chain.

Your role in the implementation
Financial
Knowledge sharing

Explanation of how you encourage implementation
We mandate GAP implementation for all PMI tobacco suppliers. Our Leaf department supports our suppliers in implementing GAP and, where we directly contract farmers, our field technicians provide direct support and recommendations. We allocate an annual budget to initiatives to catalyze the adoption of improved and innovative practices by the farmers in our supply chain (i.e.: in 2021 $5.3 million for initiatives specific to environmental related topics such as climate change, water security and combat deforestation). Similar yearly expenditure is expected over the next 10 years.

Climate change related benefit
Emissions reductions (mitigation)
Increasing resilience to climate change (adaptation)

Comment
In line with our GAP principles, genetically modified (GM) tobacco is not acceptable to PMI. We have solid programs in place to avoid the inadvertent introduction of GM tobacco into the products we commercialize.

C-AC12.2b/C-FB12.2b/C-PF12.2b

(C-AC12.2b/C-FB12.2b/C-PF12.2b) Do you collect information from your suppliers about the outcomes of any implemented agricultural/forest management practices you have encouraged?
Yes

C12.3

(C12.3) Does your organization engage in activities that could either directly or indirectly influence policy, law, or regulation that may impact the climate?

Row 1

Direct or indirect engagement that could influence policy, law, or regulation that may impact the climate

Yes, we engage indirectly through trade associations

Yes, we engage indirectly by funding other organizations whose activities may influence policy, law, or regulation that may significantly impact the climate

Does your organization have a public commitment or position statement to conduct your engagement activities in line with the goals of the Paris Agreement?

Yes

Attach commitment or position statement(s)

PMI Code of Conduct

Overview of Engagement Principles

overview-of-engagement-principles.pdf

english_code_of_conduct_external_online_180116.pdf

Describe the process(es) your organization has in place to ensure that your engagement activities are consistent with your overall climate change strategy

PMI operates within an overarching Code of Conduct (CoC), and a set of Principles and Practices which set the rules and processes that need to be followed when engaging third parties. Together, these regulate engagement activities such as external communications, public statements, making contributions or providing financial support, and other relevant activities involving government officials, public organizations and other third parties. PMI has a publicly available 'Overview of engagement principles' which describes the basic tents of the CoC and our key principles and practices, and highlights PMI's key priorities when interacting with these stakeholders, including ensuring that the positions PMI publicly advocates, and the arguments supporting such positions are consistent with internal positions and do not overlook any information that PMI may internally have that might be material to our audience. PMI has an internal Compliance Department and help-line available to employees wanting to report suspected violations of our Guidebook for Success or Principles & Practices. Reports can be made anonymously.

We routinely evaluate our participation to ensure the objectives of the external parties we engage with align with our long-term interests, and that their activities continue to comply with our CoC and policies. If inconsistencies or disagreement with certain positions adopted by organizations are found, PMI may withdraw its participation or support.

Primary reason for not engaging in activities that could directly or indirectly influence policy, law, or regulation that may impact the climate

<Not Applicable>

Explain why your organization does not engage in activities that could directly or indirectly influence policy, law, or regulation that may impact the climate

<Not Applicable>

C12.3b

(C12.3b) Provide details of the trade associations your organization engages with which are likely to take a position on any policy, law or regulation that may impact the climate.

Trade association

Other, please specify (U.S. Council for International Business (USCIB))

Is your organization's position on climate change consistent with theirs?

Consistent

Has your organization influenced, or is your organization attempting to influence their position?

We are not attempting to influence their position

State the trade association's position on climate change, explain where your organization's position differs, and how you are attempting to influence their position (if applicable)

One of the main areas of focus of the USCIB is sustainable development and climate action. Part of their mission is to encourage the US to stay actively involved in the UN climate treaty, and to remain in the Paris Agreement, to defend and advance US economic interests, and to fight against proposals that would undermine US competitiveness, or block business involvement in the UNFCCC. Other relevant areas of USCIB's focus include 1) seek opportunities to design international climate cooperation with works with markets and business to encourage companies to integrate climate mitigation into their activities and value chains; 2) advocate for appropriate regulatory frameworks to protect investments in green technology; 3) advocate that UN negotiations must not give rise to barriers to trade and investment, or overlook the role financial institutions play in the UN's efforts to mobilize funds for climate action; 4) market based carbon pricing tools need to reflect the unique economic and energy circumstances that and goals that different countries have; 5) advocate across multiple channels to establish a recognized business channel into the UNFCCC process, as well as to other UN forums tasked with environment and sustainable development policy.

Funding figure your organization provided to this trade association in the reporting year, if applicable (currency as selected in C0.4) (optional)

Describe the aim of your organization's funding

<Not Applicable>

Have you evaluated whether your organization's engagement with this trade association is aligned with the goals of the Paris Agreement?

Yes, we have evaluated, and it is aligned

Trade association

Other, please specify (US-ASEAN Business Council)

Is your organization's position on climate change consistent with theirs?

Consistent

Has your organization influenced, or is your organization attempting to influence their position?

We are not attempting to influence their position

State the trade association's position on climate change, explain where your organization's position differs, and how you are attempting to influence their position (if applicable)

Their Energy Committee covers broad energy improvement topics including energy efficiency and renewables.

Funding figure your organization provided to this trade association in the reporting year, if applicable (currency as selected in C0.4) (optional)

Describe the aim of your organization's funding
<Not Applicable>

Have you evaluated whether your organization's engagement with this trade association is aligned with the goals of the Paris Agreement?
Yes, we have evaluated, and it is aligned

Trade association
Other, please specify (EconomieSuisse)

Is your organization's position on climate change consistent with theirs?
Consistent

Has your organization influenced, or is your organization attempting to influence their position?
We are not attempting to influence their position

State the trade association's position on climate change, explain where your organization's position differs, and how you are attempting to influence their position (if applicable)
Energy and Environment section: "Climate protection concerns us all and Swiss business is pointing the way. Based on voluntary measures it has successfully charted a path of CO2 reduction and continues to stay the course. Innovation in this sector is doubly advantageous: resource-friendly processes help cut costs and may evolve into business ideas. Regardless of any decision for or against certain technologies we promote a reliable, affordable, and environmentally friendly energy supply."

Funding figure your organization provided to this trade association in the reporting year, if applicable (currency as selected in C0.4) (optional)

Describe the aim of your organization's funding
<Not Applicable>

Have you evaluated whether your organization's engagement with this trade association is aligned with the goals of the Paris Agreement?
Yes, we have evaluated, and it is aligned

Trade association
US Chamber of Commerce

Is your organization's position on climate change consistent with theirs?
Consistent

Has your organization influenced, or is your organization attempting to influence their position?
We are not attempting to influence their position

State the trade association's position on climate change, explain where your organization's position differs, and how you are attempting to influence their position (if applicable)
The U.S. Chamber of Commerce supports U.S. participation in the Paris Agreement. The Chamber is an official observer to the United Nations Framework Convention on Climate Change (UNFCCC) and continues to work with its overseas partners to pursue international collaboration between governments and businesses. As part of the ongoing efforts, the U.S. Chamber has launched a Member Task Force on Climate Action to help better understand the range of mechanisms, innovations, and internal processes that businesses are engaging to confront climate change. The Chamber believes that effective climate policy should require strategic government support, including robust federal programs that help companies develop and adopt commercially viable clean energy technologies, embrace innovation and improve energy efficiency on both supply and demand; and promote climate-resilient infrastructures.

Funding figure your organization provided to this trade association in the reporting year, if applicable (currency as selected in C0.4) (optional)

Describe the aim of your organization's funding
<Not Applicable>

Have you evaluated whether your organization's engagement with this trade association is aligned with the goals of the Paris Agreement?
Yes, we have evaluated, and it is aligned

C12.3c

(C12.3c) Provide details of the funding you provided to other organizations in the reporting year whose activities could influence policy, law, or regulation that may impact the climate.

Type of organization
Other, please specify (Non-profit organization)

State the organization to which you provided funding
Business for Social Responsibility

Funding figure your organization provided to this organization in the reporting year (currency as selected in C0.4)
47000

Describe the aim of this funding and how it could influence policy, law or regulation that may impact the climate
The reported funding figure (expressed in USD and related to calendar year 2021) covers PMI's annual membership fee to the organization and participation in one working group, which may indirectly fund activities which could influence policy, law, or regulation that may impact the climate
BSR publishes "public research funded by civil society, business, academic, and government partners to inform actions and policies on critical environmental and social challenges." (Source: https://www.bsr.org/en/research)
It also hosts the following collaborative initiatives of companies which may influence climate policy: (Source: https://www.bsr.org/en/collaboration/list)
We Mean Business Coalition: companies and investors creating a low-carbon revolution
Action for Sustainable (Palm) Derivatives
Business Alliance to Scale Climate Solutions
Energy for a Just Transition
Future of Reporting
Sustainable Air Freight Alliance
Transform to Net Zero
Value Chain Risk to Resilience

Have you evaluated whether this funding is aligned with the goals of the Paris Agreement?
Yes, we have evaluated, and it is aligned

Type of organization
Non-Governmental Organization (NGO) or charitable organization

State the organization to which you provided funding
World Business Council for Sustainable Development

Funding figure your organization provided to this organization in the reporting year (currency as selected in C0.4)
205000

Describe the aim of this funding and how it could influence policy, law or regulation that may impact the climate
The reported funding figure (expressed in USD, converted from CHF 187,000 – xe.com rate from 31.12.2021 – and related to calendar year 2021) covers PMI's annual membership fee and participation in various WBCSD's Working Groups which may indirectly fund activities which could influence policy, law, or regulation that may impact the climate.

WBCSD is a CEO-led community of over 200 of the world's leading sustainable businesses working collectively to accelerate the system transformations needed for a net-zero, nature positive, and more equitable future. It does this by engaging executives and sustainability leaders from business and elsewhere to share practical insights on the obstacles and opportunities in tackling the integrated climate, nature and inequality sustainability challenge; by co-developing "how-to" CEO-guides from these insights; by providing science-based target guidance including standards and protocols; and by developing tools and platforms to help leading businesses in sustainability drive integrated actions to tackle climate, nature and inequality challenges across sectors and geographical regions. (Source: https://www.wbcsd.org/))
Here (https://www.wbcsd.org/Imperatives/Climate-Action) is a summary of WBSCD's climate-related work which may influence climate policy including working groups, publications, collective action by companies, events, and more. WBCSD actively engages in the major international environmental summits such as COPs on climate and biodiversity.

Have you evaluated whether this funding is aligned with the goals of the Paris Agreement?
Yes, we have evaluated, and it is aligned

C12.4

(C12.4) Have you published information about your organization's response to climate change and GHG emissions performance for this reporting year in places other than in your CDP response? If so, please attach the publication(s).

Publication
In mainstream reports

Status
Complete

Attach the document
pmi-integrated-report-2021.pdf
2022 Proxy Statement.pdf
pmi_2021_annualreport.pdf

Page/Section reference
Integrated report: summary of environmental incl. climate change performance p6-11, commentary from the Executive Chairman; CEO and CFO p11-15, details on environmental performance p162-193 (operational) and p98-117 (product). Annual Report on Form 10-K: response to environmental regulation incl. climate change; p5, climate-related risks and their potential impact on the supply chain p13. Proxy statement filed with the U.S. Security and Exchange Commission: company performance and targets p45-48

Content elements
Governance
Strategy
Risks & opportunities
Emissions figures
Emission targets
Other metrics

Comment
PMI has an Integrated Report in place which describes how the company creates value over the short, medium and long terms. Additionally, PMI integrates climate-related elements regarding the company's climate related risks and response as part of its Annual Report on Form 10-K and Proxy Statement, filled with the U.S. Security and Exchange Commission. In its journey towards integrated reporting, PMI published its Integrated Report in 2021 in accordance with the GRI Standards: core option, which includes an integrated overview of PMI's performance, covering, among others, also financial information. Its contents are shaped by a formal materiality assessment, which considers stakeholder perspectives as well as our impacts on sustainable development. Climate protection is assessed as tier 1 topic for PMI, for which an extensive program is in place.
We periodically conduct a climate change risks and opportunities assessment to fully understand PMI's impact across our entire value chain. This work aligns with international expectations such as the Paris Agreement to mitigate and adapt to climate impacts.
Scenario analysis formed part of the climate change risks and opportunities assessment we conducted in 2015 on physical risks and opportunities. Throughout 2018 and 2019, we updated that earlier risk assessment, and confirmed the outcomes in 2021, accounting for changes in PMI's footprint and business model that led to define 2019 as our new baseline year to for our decarbonization targets, including the validation of our revised Science Based targets based on the 1.5 °C trajectory. Our objective is also to further align our work and reporting with the recommendations of the TCFD, which aims to foster voluntary climate-related disclosures that provide clear, reliable, and useful information to the financial community.
The updated assessment identified climate change risks and opportunities (CCRO) that align with the TCFD transition and physical risk categorizations. Throughout this process, we mapped 149 CCROs across materiality and certainty and then divided them according to PMI's risk categories: proactive, reactive, nonmaterial, watch, and potential quick wins, so we could better integrate them into the business. After further analysis, it was decided to prioritize the proactive CCROs, as they have the highest certainty and materiality levels.

C13. Other land management impacts

C-AC13.2/C-FB13.2/C-PF13.2

(C-AC13.2/C-FB13.2/C-PF13.2) Do you know if any of the management practices mentioned in C-AC12.2a/C-FB12.2a/C-PF12.2a that were implemented by your suppliers have other impacts besides climate change mitigation/adaptation?
Yes

C-AC13.2a/C-FB13.2a/C-PF13.2a

(C-AC13.2a/C-FB13.2a/C-PF13.2a) Provide details of those management practices implemented by your suppliers that have other impacts besides climate change mitigation/adaptation.

Management practice reference number
MP1

Overall effect
Positive

Which of the following has been impacted?
Other, please specify (Environmental Management)

Description of impacts
In addition to greenhouse gas emissions, environmental impacts of our suppliers can include impacts to:
• Air, such as through sulfur dioxide emissions from burning fuel oil in boilers which can lead to acid rain;
• Water, such as wastewater discharge from plating operations, which can lead to poisoning of fish and metal contamination of plants;
• Soil, such as through leakages from storage tanks which could lead to soil contamination

Have any response to these impacts been implemented?
Yes

Description of the response(s)
The environment section of our Responsible Sourcing Principles (RSP) and Implementation Guidelines covers environmental compliance and management, and resource consumption and waste minimization. Our RSP encourages suppliers to review, identify and minimize their environmental impacts.

Management practice reference number
MP2

Overall effect
Positive

Which of the following has been impacted?
Biodiversity
Soil
Other, please specify (Human Health & Labor Practices)

Description of impacts
The environmental impact of tobacco farming can be significant, and the GAP program is therefore crucial for managing and reducing our overall environmental footprint.

In addition to greenhouse gas emissions, traditional tobacco farming uses hazardous Crop Protection Agents (CPA) that have adverse impacts on biodiversity, soil, water and human health.

Have any response to these impacts been implemented?
Yes

Description of the response(s)
Due to the nature of PMI's business, there are no significant impacts on biodiversity or deforestation from our own operations. Where we do have a larger role to play on biodiversity is in our agricultural supply chain. Impacts linked to tobacco farming are addressed through our Good Agricultural Practices program for tobacco suppliers, where we describe our requirements for good environmental practices, including integrated pest management and soil conservation practices, as well as biodiversity management.

GAP provides guidance on biodiversity management practices and requires our tobacco suppliers to develop and implement a biodiversity management plan that incorporates, and goes beyond compliance with the applicable laws, and regulations for tobacco- and forest-growing areas. Tobacco production areas must not be located in places that could cause negative effects on national parks, wildlife refuges, biological corridors, forestry reserves, buffer zones, or other public or private biological conservation areas.

C15. Biodiversity

C15.1

(C15.1) Is there board-level oversight and/or executive management-level responsibility for biodiversity-related issues within your organization?

	Board-level oversight and/or executive management-level responsibility for biodiversity-related issues	Description of oversight and objectives relating to biodiversity	Scope of board-level oversight
Row 1	Yes, both board-level oversight and executive management-level responsibility	PMI's Board of Directors (BoD) and its Committees, incl. the Nominating and Corporate Governance Committee (NCGC) and Audit Committee of the BoD, are responsible to foster the long-term success of the company incl. setting broad corporate policies, strategic direction, and overseeing management, which is responsible for daily operations. The BoD considers that environmental, social and governance (ESG) factors, including climate change, are relevant to the company's business and long-term success. As part of their responsibilities, the BoD revises and approves PMI's annual budget that includes resources required to deploy initiatives to achieve our environmental targets. PMI works towards protecting natural environment as core elements of PMI's sustainable corporate strategy and decision-making processes. As PMI's transition to a smoke-free future will require more energy, more materials and more water to produce heated tobacco units compared to cigarettes and it could result in increased environmental impact such as biodiversity losses, it is important to reduce this potential impact through effective projects. Since 2018 the BoD mandated the NCGC of the Board, composed of 5 BoD members at the time of the 2022 Proxy Statement filing, to oversee PMI's sustainability strategies and performance, including to provide recommendations to executive management on climate change-related issues, and on a set of initiatives aiming at actively reduce potential negative impacts of our business on the environment. In 2021, among other items, PMI's BoD reviewed the results of PMI's sustainability materiality assessment. As part of this revision, it was decided to update PMI's climate targets by developing long-term science-based targets, and to establish PMI's Sustainability Index (which includes KPIs related to carbon emission reductions and sustainable forestry) and use this as one of PMI's performance metrics in the three-year incentive executive compensation program. PMI's Integrated Report 2021—that constitutes the main external communication of PMI on sustainability performance, including regarding climate change—was completed with the oversight from PMI's Board of Directors and extensively reviewed by its Executive Chairman.	<Not Applicable>

C15.2

(C15.2) Has your organization made a public commitment and/or endorsed any initiatives related to biodiversity?

	Indicate whether your organization made a public commitment or endorsed any initiatives related to biodiversity	Biodiversity-related public commitments	Initiatives endorsed
Row 1	Yes, we have made public commitments and publicly endorsed initiatives related to biodiversity	Commitment to Net Positive Gain Commitment to No Net Loss Adoption of the mitigation hierarchy approach Commitment to not explore or develop in legally designated protected areas Commitment to respect legally designated protected areas Commitment to avoidance of negative impacts on threatened and protected species Commitment to secure Free, Prior and Informed Consent (FPIC) of Indigenous Peoples	CBD – Global Biodiversity Framework SDG Other, please specify (- Business for Nature - Taskforce on nature finance disclosure)

C15.3

(C15.3) Does your organization assess the impact of its value chain on biodiversity?

	Does your organization assess the impact of its value chain on biodiversity?	Portfolio
Row 1	Yes, we assess impacts on biodiversity in our upstream value chain only	<Not Applicable>

C15.4

(C15.4) What actions has your organization taken in the reporting year to progress your biodiversity-related commitments?

	Have you taken any actions in the reporting period to progress your biodiversity-related commitments?	Type of action taken to progress biodiversity- related commitments
Row 1	Yes, we are taking actions to progress our biodiversity-related commitments	Land/water protection Land/water management

C15.5

(C15.5) Does your organization use biodiversity indicators to monitor performance across its activities?

	Does your organization use indicators to monitor biodiversity performance?	Indicators used to monitor biodiversity performance
Row 1	Yes, we use indicators	Pressure indicators

C15.6

(C15.6) Have you published information about your organization's response to biodiversity-related issues for this reporting year in places other than in your CDP response? If so, please attach the publication(s).

Report type	Content elements	Attach the document and indicate where in the document the relevant biodiversity information is located
In voluntary sustainability report or other voluntary communications	Content of biodiversity-related policies or commitments	Zero Deforestation Manifesto p. 2 Integrated Report 2021 p. 191-192 pmi-zero-deforestation-manifesto 2.0.pdf pmi-integrated-report-2021.pdf

C16. Signoff

C-FI

(C-FI) Use this field to provide any additional information or context that you feel is relevant to your organization's response. Please note that this field is optional and is not scored.

C16.1

(C16.1) Provide details for the person that has signed off (approved) your CDP climate change response.

	Job title	Corresponding job category
Row 1	Chief Executive Officer	Chief Executive Officer (CEO)

SC. Supply chain module

SC0.0

(SC0.0) If you would like to do so, please provide a separate introduction to this module.

Philip Morris International Inc. (PMI) is a leading international tobacco company working to deliver a smoke-free future and evolving its portfolio for the long-term to include products outside of the tobacco and nicotine sector. PMI has its executive headquarters in New York, U.S., its primary listing on the New York Stock Exchange (NYSE: PM), and its Operations Center in Lausanne, Switzerland. The company's current product portfolio primarily consists of cigarettes and smoke-free products, including heat-not-burn, vapor, and oral nicotine products, which are sold in markets outside the U.S. In 2021, PMI adjusted net revenues amounted to approximately USD 31.7 billion, of which 29.1% related to the sale of smoke-free products.

PMI's ambition to become a company with a net positive impact on society starts with researching, developing, and commercializing less harmful alternatives to cigarettes for those adults who otherwise would continue to smoke, ultimately allowing us to phase out cigarettes and become a fully smoke-free business. As a next step, we are expanding our offerings to include products that fill critical unmet needs in the wellness and healthcare space. To achieve our purpose, a radical transformation of our business is required. Sustainability stands at the core of our corporate strategy and helps address some of the challenges resulting from the transition, minimizing negative externalities associated with our products, operations, and value chain, while spurring innovation and better positioning the company for success over the long haul.

Our approach to sustainability focuses on developing strategies that can successfully address the environmental, social, and governance topics identified as a priority by our sustainability materiality assessment. From an environmental standpoint, we focus on reducing post-consumer waste from our products, tackling climate change, and preserving nature.

Engagement beyond our own operations—in particular in our supply chain—is key, as this is where a significant portion of our sustainability impacts occurs. We are working with business partners to proactively identify, manage, and reduce risks, and create shared value.

Our business has a significant, global supply chain organized in two main streams: direct spend focused on materials used in the manufacture of our finished products (e.g., tobacco leaf, packaging materials, electronic devices and accessories) and indirect spend focused on goods and services necessary to operate our business.

The description above is a summary and is qualified in its entirety by reference to the full text of PMI's Annual Report on Form 10-K for the year ended 2021, 2022 Proxy Statement dated March 24, 2022 filed with the U.S. Securities and Exchange Commission on the same date, and the full text of PMI's Integrated Report 2021. Certain terms, definitions and explanatory notes, as well as reconciliations of the applicable non-GAAP financial measures, are set forth in the materials referenced above.

In this submission:

-"PMI," "we," "us," and "our" refer to Philip Morris International Inc. and its subsidiaries;

-Trademarks and service marks in this submission are the registered property of, or licensed by, the subsidiaries of PMI and are italicized;

-Aspirational targets and goals set forth in this submission do not constitute financial projections, and achievement of future results is subject to risks, uncertainties, and inaccurate assumptions, as outlined in our forward-looking and cautionary statements on page 252 of PMI Integrated Report 2021;

-Materiality: In this submission and in related communications, the terms "materiality," "material" and similar terms, when used in the context of economic, environmental, and social topics, are defined in the referenced sustainability standards, and are not meant to correspond to the concept of materiality under the U.S. securities laws and/or disclosures required by the US Securities and Exchange Commission.

-Unless otherwise indicated, the scope of the data in this submission covers our operations worldwide for the full calendar year 2021 or reflects the status as of December 31, 2021. Where not specified, data come from PMI financials, non-financials, or estimates. Unless explicitly stated, the data and information in this submission do not incorporate wellness and healthcare acquisitions made by PMI during 2021 of Fertin Pharma A/S, Vectura Group plc., and OtiTopic, Inc., which together represented 0.3 percent of PMI's total reported net revenues in 2021.

SC0.1

(SC0.1) What is your company's annual revenue for the stated reporting period?

	Annual Revenue
Row 1	31405000000

SC1.1

(SC1.1) Allocate your emissions to your customers listed below according to the goods or services you have sold them in this reporting period.

Requesting member
S Group

Scope of emissions
Scope 1

Allocation level
Company wide

Allocation level detail
<Not Applicable>

Emissions in metric tonnes of CO2e
357

Uncertainty (±%)
5

Major sources of emissions

Emissions from scope 1 include fuel used in factories, fleet, warehouses and offices.

Verified
No

Allocation method
Allocation based on the volume of products purchased

Market value or quantity of goods/services supplied to the requesting member
832000000

Unit for market value or quantity of goods/services supplied
Other, please specify (Cigarette equivalent unit)

Please explain how you have identified the GHG source, including major limitations to this process and assumptions made
The emissions were calculated by extrapolation of PMI wide scope 1 emissions 308,822 tCO2e and the total annual volume shipped 719,851 (624,875 cigarettes and 94,976 heated tobacco units) million equivalent cigarettes and 832 million equivalent cigarette units purchased by the customer in 2021.

Requesting member
S Group

Scope of emissions
Scope 2

Allocation level
Company wide

Allocation level detail
<Not Applicable>

Emissions in metric tonnes of CO2e
74

Uncertainty (±%)
5

Major sources of emissions
Electricity and district heating used in our factories and offices.

Verified
No

Allocation method
Allocation based on the number of units purchased

Market value or quantity of goods/services supplied to the requesting member
832000000

Unit for market value or quantity of goods/services supplied
Other, please specify (Cigarette equivalent unit)

Please explain how you have identified the GHG source, including major limitations to this process and assumptions made
The emissions were calculated by extrapolation of PMI wide scope 2 emissions 64,217 tCO2e and the total annual volume shipped 719,851 (624,875 cigarettes and 94,976 heated tobacco units) million equivalent cigarettes and 832 million equivalent cigarette units purchased by the customer in 2021.

Requesting member
S Group

Scope of emissions
Scope 3

Allocation level
Company wide

Allocation level detail
<Not Applicable>

Emissions in metric tonnes of CO2e
4330

Uncertainty (±%)
5

Major sources of emissions
Our scope 3 emissions are mainly due to tobacco agriculture and curing, sourcing raw materials like tobacco, paper and cardboard, due to services like marketing or consulting, due to upstream and downstream logistics and other minor impacts like business travel, use phase and end of life of our products.

Verified
No

Allocation method
Allocation based on the number of units purchased

Market value or quantity of goods/services supplied to the requesting member
832000000

Unit for market value or quantity of goods/services supplied
Other, please specify (Cigarette equivalent unit)

Please explain how you have identified the GHG source, including major limitations to this process and assumptions made

The emissions were calculated by extrapolation of PMI wide scope 3 emissions 3,748,477 tCO2e and the total annual volume shipped 719,851 (624,875 cigarettes and 94,976 heated tobacco units) million equivalent cigarettes and 832 million equivalent cigarette units purchased by the customer in 2021.

Requesting member
Kesko Corporation

Scope of emissions
Scope 1

Allocation level
Company wide

Allocation level detail
<Not Applicable>

Emissions in metric tonnes of CO2e
385

Uncertainty (±%)
5

Major sources of emissions
Emissions from scope 1 include fuel used in factories, fleet, warehouses and offices.

Verified
No

Allocation method
Allocation based on the number of units purchased

Market value or quantity of goods/services supplied to the requesting member
897000000

Unit for market value or quantity of goods/services supplied
Other, please specify (Cigarette equivalent unit)

Please explain how you have identified the GHG source, including major limitations to this process and assumptions made
The emissions were calculated by extrapolation of PMI wide scope 1 emissions 308,822 tCO2e and the total annual volume shipped 719,851 (624,875 cigarettes and 94,976 heated tobacco units) million equivalent cigarettes and 897 million equivalent cigarette units purchased by the customer in 2021.

Requesting member
Kesko Corporation

Scope of emissions
Scope 2

Allocation level
Company wide

Allocation level detail
<Not Applicable>

Emissions in metric tonnes of CO2e
80

Uncertainty (±%)
5

Major sources of emissions
Electricity and district heating used in our factories and offices.

Verified
No

Allocation method
Allocation based on the number of units purchased

Market value or quantity of goods/services supplied to the requesting member
897000000

Unit for market value or quantity of goods/services supplied
Other, please specify (Cigarette equivalent unit)

Please explain how you have identified the GHG source, including major limitations to this process and assumptions made
The emissions were calculated by extrapolation of PMI wide scope 2 emissions 64,217 tCO2e and the total annual volume shipped 719,851 (624,875 cigarettes and 94,976 heated tobacco units) million equivalent cigarettes and 897 million equivalent cigarette units purchased by the customer in 2021.

Requesting member
Kesko Corporation

Scope of emissions
Scope 3

Allocation level
Company wide

Allocation level detail
<Not Applicable>

Emissions in metric tonnes of CO2e
4670

Uncertainty (±%)
5

Major sources of emissions
Our scope 3 emissions are mainly due to tobacco agriculture and curing, sourcing raw materials like tobacco, paper and cardboard, due to services like marketing or consulting, due to upstream and downstream logistics and other minor impacts like business travel, use phase and end of life of our products.

Verified
No

Allocation method
Allocation based on the number of units purchased

Market value or quantity of goods/services supplied to the requesting member
897000000

Unit for market value or quantity of goods/services supplied
Other, please specify (Cigarette equivalent unit)

Please explain how you have identified the GHG source, including major limitations to this process and assumptions made
The emissions were calculated by extrapolation of PMI wide scope 3 emissions 3,748,477 tCO2e and the total annual volume shipped 719,851 (624,875 cigarettes and 94,976 heated tobacco units) million equivalent cigarettes and 897 million equivalent cigarette units purchased by the customer in 2021.

Requesting member
Salling Group A/S

Scope of emissions
Scope 1

Allocation level
Company wide

Allocation level detail
<Not Applicable>

Emissions in metric tonnes of CO2e
26

Uncertainty (±%)
5

Major sources of emissions
Emissions from scope 1 include fuel used in factories, fleet, warehouses and offices.

Verified
No

Allocation method
Allocation based on the number of units purchased

Market value or quantity of goods/services supplied to the requesting member
61000000

Unit for market value or quantity of goods/services supplied
Other, please specify (Cigarette equivalent unit)

Please explain how you have identified the GHG source, including major limitations to this process and assumptions made
The emissions were calculated by extrapolation of PMI wide scope 1 emissions 308,822 tCO2e and the total annual volume shipped 719,851 (624,875 cigarettes and 94,976 heated tobacco units) million equivalent cigarettes and 55 million equivalent cigarette units and 6 million equivalent Heets units purchased by the customer in 2021.

Requesting member
Salling Group A/S

Scope of emissions
Scope 2

Allocation level
Company wide

Allocation level detail
<Not Applicable>

Emissions in metric tonnes of CO2e
5

Uncertainty (±%)
5

Major sources of emissions
Electricity and district heating used in our factories and offices.

Verified
No

Allocation method
Allocation based on the number of units purchased

Market value or quantity of goods/services supplied to the requesting member
61000000

Unit for market value or quantity of goods/services supplied
Other, please specify (Cigarette equivalent unit)

Please explain how you have identified the GHG source, including major limitations to this process and assumptions made
The emissions were calculated by extrapolation of PMI wide scope 2 emissions 64,217 tCO2e and the total annual volume shipped 719,851 (624,875 cigarettes and 94,976 heated tobacco units) million equivalent cigarettes and 55 million equivalent cigarette units and 6 million equivalent Heets units purchased by the customer in 2021.

Requesting member
Salling Group A/S

Scope of emissions
Scope 3

Allocation level
Company wide

Allocation level detail
<Not Applicable>

Emissions in metric tonnes of CO2e
318

Uncertainty (±%)
5

Major sources of emissions
Our scope 3 emissions are mainly due to tobacco agriculture and curing, sourcing raw materials like tobacco, paper and cardboard, due to services like marketing or consulting, due to upstream and downstream logistics and other minor impacts like business travel, use phase and end of life of our products.

Verified
No

Allocation method
Allocation based on the number of units purchased

Market value or quantity of goods/services supplied to the requesting member
61000000

Unit for market value or quantity of goods/services supplied
Other, please specify (Cigarette equivalent unit)

Please explain how you have identified the GHG source, including major limitations to this process and assumptions made
The emissions were calculated by extrapolation of PMI wide scope 3 emissions 3,748,477 tCO2e and the total annual volume shipped 719,851 (624,875 cigarettes and 94,976 heated tobacco units) million equivalent cigarettes and 55 million equivalent cigarette units and 6 million equivalent Heets units purchased by the customer in 2021.

Requesting member
J Sainsbury Plc

Scope of emissions
Scope 1

Allocation level
Company wide

Allocation level detail
<Not Applicable>

Emissions in metric tonnes of CO2e
154

Uncertainty (±%)
5

Major sources of emissions
Emissions from scope 1 include fuel used in factories, fleet, warehouses and offices.

Verified
No

Allocation method
Allocation based on the number of units purchased

Market value or quantity of goods/services supplied to the requesting member
358000000

Unit for market value or quantity of goods/services supplied
Other, please specify (Cigarette equivalent unit)

Please explain how you have identified the GHG source, including major limitations to this process and assumptions made
The emissions were calculated by extrapolation of PMI wide scope 1 emissions 308,822 tCO2e and the total annual volume shipped 719,851 (624,875 cigarettes and 94,976 heated tobacco units) million equivalent cigarettes and 252 million equivalent cigarette units and 106 million equivalent Heets units purchased by the customer in 2021.

Requesting member
J Sainsbury Plc

Scope of emissions
Scope 2

Allocation level
Company wide

Allocation level detail
<Not Applicable>

Emissions in metric tonnes of CO2e
32

Uncertainty (±%)
5

Major sources of emissions
Electricity and district heating used in our factories and offices.

Verified
No

Allocation method
Allocation based on the number of units purchased

Market value or quantity of goods/services supplied to the requesting member
358000000

Unit for market value or quantity of goods/services supplied
Other, please specify (Cigarette equivalent unit)

Please explain how you have identified the GHG source, including major limitations to this process and assumptions made
The emissions were calculated by extrapolation of PMI wide scope 2 emissions 64,217 tCO2e and the total annual volume shipped 719,851 (624,875 cigarettes and 94,976 heated tobacco units) million equivalent cigarettes and 252 million equivalent cigarette units and 106 million equivalent Heets units purchased by the customer in 2021.

Requesting member
J Sainsbury Plc

Scope of emissions
Scope 3

Allocation level
Company wide

Allocation level detail
<Not Applicable>

Emissions in metric tonnes of CO2e
1863

Uncertainty (±%)
5

Major sources of emissions
Our scope 3 emissions are mainly due to tobacco agriculture and curing, sourcing raw materials like tobacco, paper and cardboard, due to services like marketing or consulting, due to upstream and downstream logistics and other minor impacts like business travel, use phase and end of life of our products.

Verified
No

Allocation method
Allocation based on the number of units purchased

Market value or quantity of goods/services supplied to the requesting member
358000000

Unit for market value or quantity of goods/services supplied
Other, please specify (Cigarette equivalent unit)

Please explain how you have identified the GHG source, including major limitations to this process and assumptions made
The emissions were calculated by extrapolation of PMI wide scope 3 emissions 3,748,477 tCO2e and the total annual volume shipped 719,851 (624,875 cigarettes and 94,976 heated tobacco units) million equivalent cigarettes and 252 million equivalent cigarette units and 106 million equivalent Heets units purchased by the customer in 2021.

SC1.2

(SC1.2) Where published information has been used in completing SC1.1, please provide a reference(s).

The best source of all our environmental information is our CDP climate response or in PMI 2021's Integrated Report that can be downloaded from our website: https://pmidotcom3-prd.s3.amazonaws.com/docs/default-source/pmi-sustainability/pmi-integrated-report-2021.pdf?sfvrsn=646e6ab6_4 (https://pmidotcom3-prd.s3.amazonaws.com/docs/default-source/pmi-sustainability/pmi-integrated-report-2021.pdf?sfvrsn=646e6ab6_4)

SC1.3

(SC1.3) What are the challenges in allocating emissions to different customers, and what would help you to overcome these challenges?

Allocation challenges	Please explain what would help you overcome these challenges
Diversity of product lines makes accurately accounting for each product/product line cost ineffective	We would need detailed bill of materials and emissions per SKU and volumes purchased by each customer
We face no challenges	Extrapolating customer allocation on volume based is not an exercise that require too many complicated information and has proved efficient to provide the right level of information to clients that were requesting inputs for their indirect emissions.

SC1.4

(SC1.4) Do you plan to develop your capabilities to allocate emissions to your customers in the future?

Yes

SC1.4a

(SC1.4a) Describe how you plan to develop your capabilities.

We have internal capabilities to allocate emissions to customers. If more customers request more information, we will develop dedicated tools to answer to them managing the complexity of our product lines and accounting for the different input values that define the carbon footprint of our conventional products versus our reduced risk products such as heat not burn products.

SC2.1

(SC2.1) Please propose any mutually beneficial climate-related projects you could collaborate on with specific CDP Supply Chain members.

Requesting member
S Group

Group type of project
Other, please specify (We seek to partner with our customers and study potential collaborative opportunities. We invite our customers to provide ideas on logistics, packaging designs or operational opportunities that would improve both of our environmental footprints.)

Type of project
Other, please specify (Partnering to achieve environmental footprint reduction)

Emissions targeted
Other, please specify (Partnering to achieve environmental footprint reduction)

Estimated timeframe for carbon reductions to be realized
Other, please specify (On-going)

Estimated lifetime CO2e savings
0

Estimated payback
Cost/saving neutral

Details of proposal
We seek to partner with our customers and study potential collaborative opportunities. We invite our customers to provide ideas on logistics, packaging designs or operational opportunities that would improve both of our environmental footprints: carbon emissions, water scarcity, waste and littering and deforestation.

Requesting member
Kesko Corporation

Group type of project
Other, please specify (We seek to partner with our customers and study potential collaborative opportunities. We invite our customers to provide ideas on logistics, packaging designs or operational opportunities that would improve both of our environmental footprints)

Type of project
Other, please specify (Partnering to achieve environmental footprint reduction)

Emissions targeted
Other, please specify (Partnering to achieve environmental footprint reduction)

Estimated timeframe for carbon reductions to be realized
Other, please specify (On-going)

Estimated lifetime CO2e savings
0

Estimated payback
Cost/saving neutral

Details of proposal
We seek to partner with our customers and study potential collaborative opportunities. We invite our customers to provide ideas on logistics, packaging designs or operational opportunities that would improve both of our environmental footprints: carbon emissions, water scarcity, waste and littering and deforestation.

Requesting member
Salling Group A/S

Group type of project
Other, please specify (We seek to partner with our customers and study potential collaborative opportunities. We invite our customers to provide ideas on logistics, packaging designs or operational opportunities that would improve both of our environmental footprints)

Type of project
Other, please specify (Partnering to achieve environmental footprint reduction)

Emissions targeted
Other, please specify (Partnering to achieve environmental footprint reduction)

Estimated timeframe for carbon reductions to be realized
Other, please specify (On-going)

Estimated lifetime CO2e savings
0

Estimated payback
Cost/saving neutral

Details of proposal
We seek to partner with our customers and study potential collaborative opportunities. We invite our customers to provide ideas on logistics, packaging designs or operational opportunities that would improve both of our environmental footprints: carbon emissions, water scarcity, waste and littering and deforestation.

Requesting member
J Sainsbury Plc

Group type of project
Other, please specify (We seek to partner with our customers and study potential collaborative opportunities. We invite our customers to provide ideas on logistics, packaging designs or operational opportunities that would improve both of our environmental footprints)

Type of project
Other, please specify (Partnering to achieve environmental footprint reduction)

Emissions targeted
Other, please specify (Partnering to achieve environmental footprint reduction)

Estimated timeframe for carbon reductions to be realized
Other, please specify (On-going)

Estimated lifetime CO2e savings
0

Estimated payback
Cost/saving neutral

Details of proposal
We seek to partner with our customers and study potential collaborative opportunities. We invite our customers to provide ideas on logistics, packaging designs or operational opportunities that would improve both of our environmental footprints: carbon emissions, water scarcity, waste and littering and deforestation.

SC2.2

(SC2.2) Have requests or initiatives by CDP Supply Chain members prompted your organization to take organizational-level emissions reduction initiatives?
No

SC4.1

(SC4.1) Are you providing product level data for your organization's goods or services?
No, I am not providing data

Submit your response

In which language are you submitting your response?
English

Please confirm how your response should be handled by CDP

	I understand that my response will be shared with all requesting stakeholders	Response permission
Please select your submission options	Yes	Public

Please confirm below
I have read and accept the applicable Terms